267
269
270
272
273
274
276
277
277
277
278
279
280
281
281
282
83
83
84
84

THE

WESTERN JOURNAL

OF

MEDICINE AND SURGERY.

MARCH, 1844.

Art. I.—*Report of a Series of Experiments on the alleged Mental Sympathy of a person said to be in a state of Mesmeric Somniloquism.* By an Association of Gentlemen.

EDITORAL NOTICE.

The experiments recorded in the following Report were made at our suggestion, on a young lady lately exhibited publicly in this city. The interest excited by these public exhibitions, here and elsewhere, may justify us in publishing an account of the series of private experiments of which we give the entire record. Several of them it would have been desirable to repeat, but opportunity for doing so did not occur. The Report after being drawn up was submitted to the gentlemen who made the experiments, who decided, unanimously, that it presented the facts of the case correctly. Indeed, they were copied with very great care from the original records. After discussing the report, it was ordered to be published in this Journal, but as some of the gentlemen

wished their names withheld, the whole have been suppressed. Had their names gone with it, their high respectability for intelligence and integrity, would have given additional assurance of the truth of what the report contains. While preparing the report, we were led to draw up a speculative paper on the Philosophy of Mesmeric Somniloquism, which was read immediately after that document, and will appear in our next number. D.

ANALYTICAL REPORT.

The Committee to whom was referred the record of the experiments lately made by themselves and their colleagues, on Mesmerism, with instructions to transcribe, analyse and present in a digested form, the facts presented in it, have sought, faithfully, to accomplish the same; and respectfully submit to the scrutiny and consideration of their associates, the following REPORT:

MODE AND OBJECT OF THE EXPERIMENTS.

The object proposed by the association, was to ascertain the truth of the assertion that the individual who has been brought by the manipulations of Mesmerism into a somnambulic and somniloquent state, is susceptible of the thoughts and feelings of the person who may be in communication, independent of all known modes of intercourse. To this end it was agreed in writing, that each member of the association, should describe the objects or scenes which he intended to present to the somniloquist, not making them known to any person whatever, and sealing the paper hand it to the member appointed to keep the same; that he would put no leading question to the somniloquist; that her answers should be listened to and reported, by members of the association, written down by others, sealed up, and delivered to another member than the one who held the other sealed papers, and that, at the close, the two sets of papers should be opened and compared; all which has been observed.

OF THE MESMERIZATION.

The somnambulic and somniloquent state was, at all the meetings of the association, produced in the same manner, in

about the same time and presented the same phenomena. Seated in front of the young lady, her mesmeriser, pressed the balls of his thumbs against hers and looking steadily in her face, it immediately assumed a subdued and quiet aspect. She did not look into his eyes, but directed her own a little downwards. Very soon a slight dilatation of the pupils occurred, to which succeded a little quivering of the eye-balls, and shortly after they rolled upwards and outwards, the lids instantly falling, and remaining down throughout the whole course of the experiments. The time occupied by the mesmerization was from two to four minutes. In three out of the four meetings, the state of the pulse before and immediately after that process was observed and recorded, and was as follows: First, before, 82 in a minute, after, 96; second, 80 before, 88 after; third, 82 before, 96 after. In two of the meetings, the pulse was examined towards the close, and found to have fallen to its natural standard. Her respiration did not appear to be changed, nor was there any sensible change in the heat of her hands and face. No spasms or cataleptic rigidity of her muscles was observed, nor any difficulty of articulation. The experiments of each afternoon, lasted about an hour and a half, during which she sat erect and unsupported on a sofa; and when brought out of the somniloquent state, seemed not to be fatigued, and declared that she was neither tired nor indisposed. No experiments were made to ascertain the reality of that state, as the mode of inquiry adopted, did not require a previous decission of that point. Without affirming, the association admitted the reality of her somniloquent condition.

SCENES AND OBJECTS RECOLLECTED BY THE GENTLEMEN IN COMMUNICATION.

As many of these were of a complex character, the committee have found it necessary to an intelligent view of the conformity of her answers, to analyse them, and present the whole in a numerical series, to which they have referred for the respective topics in writing out her answers.

Topics of Mr. A. B.

1. A gold watch with a white dial-plate, held in the hand.

2. The room in which the experiments were made.

3. Experiments on Mesmerism in a different room, all the persons present, being three gentlemen and one lady.

4. The interior of the Unitarian church, Louisville; as a public Mesmeric lecture room, two gentlemen in conversation with a mesmerized lady.

Of Mr. C. D.

5. The cave house, near the Mammoth Cave, with a view of its colonade in front.

6. Enter the cave, preceded by a guide carrying torches; light up a part with Bengal light; pass through a narrow passage to the river; cross it, and enter Cleaveland's cabinet.

7. Enter a row-boat on the (Ohio) river, clad in a hunting dress carrying a gun; proceed to six-mile island; and return against a strong wind, creating large waves with white caps.

8. Shooting wood-cook on the island.

9. The room in which the experiments were made, and the persons therein.

10. A silver lancet case, opened and the lancets exposed.

Of Mr. E. F.

11. The steamer Buffalo partially aground in the straits, St. Mary, near Lake Superior. The rocking of her by the passengers in large numbers running from side to side, on the upper deck; the engines in motion at the same time; the green shores on each side; a white awning over part of the deck; a group of ladies with a French mesmerizer in their midst.

12. Infant baptismal ceremony in Christ's Church, Cincinnati; the pastor alone within the chancel; an assemblage of infants with their nurses and parents in front; considerable number of spectators; some of the children crying.

13. The last scene repeated.

14. The same, again repeated.

15. Solitary walk, on a bright day, upon the outer side of Santa Rosa Island, in the Gulf of Mexico; white drifted sands

on each side and behind; scattered ever-greens; trees and shrubs; wave after wave breaking in white foam on the sand beach; two or three ships at a distance.

16. The same scene reproduced.

Of Mr. G. H.

17. The steeple of St. Paul's Church in this city.

18. My office, table and books.

19. The amphi-theatre of the Institute, filled with pupils, and a recent subject on the table.

20. The Washington Monument in Baltimore; a view of the city and surrounding country.

21. Public mesmeric lecture in the Unitarian church, filled by the audience; a gentleman in conversation with a mesmerized lady; (same as No. 4).

22. Professor C. in his study, arm chair, books and writing implements.

23. The Falls of Niagara.

24. A human skull.

25. Dr. B.'s person looked at.

Of Mr. I. J.

26. A Hebrew bible, held in the hand.

27. A "scene" in the House of Representatives at Washington, at night; a storm without and great confusion in the hall; the persons of Mr. Adams, Mr. Stanley, and Governor Pope.

28. The room in which the experiments are made to-day; the description of the room; persons present; how many; who? &c. (Same as No. 9.)

Of Mr. K. L.

29. Ancient church (England); large stone edifice, supported by heavy buttresses; windows arched; square tower; the great western door of remarkable architectural beauty.

30. An old yew tree.

31. Castle close by; front view; a round tower in ruins; a series of remains containing dungeons, &c.; a long low wall extending to a high tower; John of Gaunt's gateway.

32. Bull-baiting; bull fastened with a long rope to a ring set in a large stone; large concourse of people; a man sets a dog on the bull; the bull tosses him in the air; another dog set on and pins the bull.

33. Conical glass furnace; the making of glass.

34. Glass cutting.

Of Mr. M. N.

35. Mammoth Cave Hotel; company of ladies and gentlemen at supper-table.

36. After supper they visit the cave, the guides bearing lights; they enter; stop to drink at the spring; they proceed along the high archway; look at the cottages for invalids; proceed to the river which they can't cross, the boat being lost; on their return diverge to take a view of *Gorin's dome brilliantly lighted.* (Same as No. 6.)

37. Visit to Harrodsburg Springs; arrival; see company promenading on long piazza and on lot; Dr. Graham advances to receive us; we stand on the steps and look at cottages.

38. Then visit the spring through a vista of small trees; looking at pond on right hand.

39. Find gentlemen and ladies at saloon, and receive glass of water from waiter at fountain.

40. Amphi-theatre of Institute; enter by door of students and take a seat fronting Dr. C. lecturing; look at skeletons on right and left; and the Venus and Apollo beyond. (Same as No. 19.)

Of Mr. O. P.

41. A rolling mill in operation, in which I will bring forward the steam engine with its great fly-wheel in motion; the powerful cast iron rolls in full operation, drawing the red-hot bar; the nail machines also in operation.

42. I will imagine myself on board a steam boat approaching one of the locks and dams on the Kentucky river; also whilst in the lock, and the appearance from the deck on opening of the flood-gates, and passing out into the river above.

43. I will present my residence from Walnut street.

44. An interior view, as presented in the hall and parlour.

Of Mr. Q. R.

45. Harrodsburg Springs; the cottages right and left; trees; old hall with its porch; people in it. (Same as No. 37.)

46. Road to the spring; pond on the right. (Same as No. 38.)

47. Water trickling down at the springs; the house over them. (Same as No. 39.)

48. Residence of Col. Thompson; the house; yard; apartments; the family circle; fire; a young lady and gentlemen at a table; the library.

49. Green-house.

50. The anatomical theatre; skeleton; Venus; Apollo; Mannikin; the Professor; the class. (Same as Nos. 19 and 40.)

CLASSIFICATION OF HER ANSWERS.

To facilitate the study of her answers, the committee, in transcribing the whole, have thrown them into two great classes. First, those in which they had more or less conformity to the topics which occupied the attention of the gentlemen in communication with her; second, those in which her answers were almost negative, or, being positive, were, on the whole, foreign from the subjects of thought at the time. The former class, they have subdivided into cases of the first, second, and third degree of conformity, the last embracing the lowest instances of relevant answers. Thus the whole are presented in a regular series, commencing with the strongest and descending to the weakest conformity, until they end in the false and negative.

CLASS I.

Answers in the First degree of Conformity.

No. 27.—Mr. I. J.

Q. Where are we now? A. Seem to be in a room. Q. Large or small? A. Large. Q. Day or night? A. I should

think it was night. Q. Is the room lighted? A. Yes, on one side. Q. What do you see in the room? A. There seem to be persons in the room. Q. Are there many persons? A. Not a great many. Q. What do they seem to be doing? A. Seem to be still, doing nothing, don't see any ladies there. Q. Hear any noise? A. I hear a noise that sounds like water. Q. Look on one of the gentlemen, and tell how he looks. A. He seems to be an old gentlemen, standing. Q. Do you see that gentleman over there? A. He don't seem to be so large as the other, not quite so tall. His hair goes back over his head, his eyes seem to be shut. Q. Hear any noise? A. Noise of persons talking. Q. How are the lights arranged? A. They seem to be arranged on the sides and one large light before us. Q. What else do you see? A. That gentleman seems to be moving his face, don't look very pleasant sometimes; seems to be something white on one arm. Q. Look again and see if you see anything? A. I only see one arm. Q. Is the other arm hid behind his chair? A. He don't seem to have but one arm.

No. 5.—*Mr. C. D.*

Q. What do you see? A. A house, a large house. Q. What peculiarity? A. Columns in front. Q. Many of them? A. A good many, high ones.

No. 38.—*Mr. M. N.*

Q. Where are we now? A. A little elevated, looking off. Q. What do you see? A. Something like water there. Q. Where are we going now? A. Seem up. Q. How are we travelling? A. Should think walking. Q. Is it along a street? A. Not. Q. What objects do you see? A. Trees, large dark things.

No. 17.—*Mr. G. H.*

We'll take a very short walk. Q. Are you fond of looking at pretty things? A. Sometimes. Q. What am I looking at? A. A building. Q. What appearance, high or low? A. High. Q. How is the top? A. High, goes to a point. Q. How many rows of windows? A. Three all round it.

Answers in the Second degree of Conformity.

No. 29.—*Mr. K. L.*

Q. Do you love to travel? A. Yes. Q. Would you like to take a voyage to England? A. Yes. Well! we'll go as both agree. Q. See anything now? A. A building. Q. Large or small? A. Large, high, comes up round on the top; large building, top not in a point. Q. What sort of windows? A. Large, round, large door, one part dark, the light of the door. Q. How many rows of windows? A. Two. Q. What built of? A. Looks like stone, don't know. Q. Look old or new? A. Looks old, round in front.

No. 1.—*Mr. A. B.*

Q. Do you see anything now? A. You seem to have something in your hand. Q. What is it? A. I don't see it distinctly. Well! look closely at it, and then describe it to me. A. It looks like a watch. Q. What sort? A. A gold watch. Q. What face; gold or white? A. White. Q. What do you see on its face? A. Don't see anything. Q. Look close at it, see if you can see the hands. A. No sir, don't see the hands. Q. Would you like to see the hands if you could? A. Yes sir. I see one hand. Q. Can you see what it points to? A. It points to the figure three. Q. Can you see the other? Are you still trying to distinguish it? No, sir, don't see the other one. Q. Do you see anything else? A. I do not see anything but the watch.

No. 42.—*Mr. O. P.*

I'll present you an interesting scene: I'm showing you a great deal at once. A. Don't seem to be in a room, but standing up on something high and light colored. Q. We'll look off. What is before us? A. Looks like persons. Q. Look again at its extended scenery. A. Seems to be moving along like persons. Q. What else do you see? A. Something like water. Q. Is it calm or disturbed? A. Moving on one side, still on the other. Q. A great deal of it? A. Great deal. Q. Does it look like a lake or pond or ocean or what? A. Like a fall on one side, other see nothing. Q. See water

fall very distinctly? A. Not very. Q. Why call it a fall? A. The water seems to come down. Q. Take your eyes off and look in front and see if you can describe the things. A. Something bright like fire. Q. See if there be any changes; now what do you see? A. Seems to be a dark appearance. Q. See any more distinctly now? A. See persons standing near the bright. Q. We will go further and you must speak of what is now before. Do you perceive anything? A. Something very high, not distinctly. Q. Begin at the foundation low down. A. Dark, an open place there. Q. What looks dark? A. The object. Q. What is it, rock, wood, or mud? A. More like a rock. Q. Going further up, what do you see then. A. Something large, and looks brighter. Q. Describe; is it buildings, trees, or what. A. Hills. Q. Anything on them? A. Some light, some dark.

Answers in the Third degree of Conformity.

No. 20.—*Mr. G. H.*

Q. Will you cross the Alleghany mountains with me? A. Yes. Q. What do you see now? A. A building. Q. Describe it! A. Light colored. Q. Tell all about it! A. Large building, something in front like columns. Q. Is it high or low? A. Not very high nor very low. Q. What do you see as we look from the top? A. Something like water one side. Q. Anything else? A. Something like a hill, high. Q. Anything else? A. Good many buildings, another large building.

No. 32.—*Mr. K. L.*

Q. We'll take something else. Like something to amuse you, won't you? A. Yes. Q. Will you walk to my father's house? A. Yes. Q. What do you see there? A. Water. Q. Anything else? A. Something moving. Q. What does it look like? A. Persons, looks dark, moving, number of persons. Q. See anything among them? A. Something high, of different colors, tall person. Q. See any beasts? A. Dark, looks like some kind of animal. Q. See what the beast is doing! A. Walking, with something over its head, large head. Q. Are they doing anything to it? A. Putting something over

its head that is red. Q. What do you call it? A. Never saw such an animal before. Q. Does it stand still? A. No. Q. Are people looking at it? A. Some people above, looking at it, seem to be upon it. Q. See any more than one animal? A. No sir. Q. Is it pleasing or offensive? A. Looks very well.

No. 12.—*Mr. E. F.*

Q. I see something now that looks light enough to be seen distinctly: I wish you to look at it closely. A. It looks very much like a building: Seems to be dark on one side of us, and light on the other side. Q. Well, what do you see besides? A. I see persons. Q. Are you able to tell what they are doing? A. Persons seem to be standing. Q. Are they standing still or walking about? A. Some seem to be walking about. Q. Can you tell what they are doing? A. Seem standing about something, cannot tell what it is. Seems to be dark. Q. Does it appear to be day or night? A. Day. Q. What else do you see but persons? A. Something above us. Q. What does it look like? A. Seems to be bright. Q. Can you tell me any thing about it? A. No sir, I don't see it distinctly. Q. Can you see any thing else? A. No sir, I don't see any thing else very distinctly, I don't see any thing else there. Q. Can you distinguish among these people any one different from the rest? A. No sir, nothing distinct from the rest; I see something white around them, but dont see any thing else. Q. Do you see any thing else now? A. No sir.

No. 43.—*Mr. O. P.*

Q. Feel as if you were seeing well for me this evening? A. Tolerable. Could'nt see at all for the gentleman before. Q. I'll give you another object—see any thing? Something moving. Q. Tell all about it. A. See something like a house. Q. What about it like a house? A. See something like a door —open like a door—not a very pretty looking house—something on top. Q. Large or small house? A. Large. Q. What colour? A. Can't tell, not white, not red, kind of dark colour. Q. Is it as long as it is high? A. Longer. Q. Would

you like to enter it? A. Yes. Q. How can we get in? A. Have to go in at a small place by going round.

No. 2.—Mr. I. J.

Q. Do you see any thing now? A. See a building. Q. Have I any thing in my hand? A. I see something white. Q. Any other colour? A. I see something black. Q. Any other colour? A. Something red. Q. Look at it good now. A. It looks like a book. Q. Think it's a book? A. Looks like it

CLASS II.

FALSE OR NEGATIVE ANSWERS.

No. 2—Mr. A. B.

Q. Well now look closely—Do you see any thing? A. I see something that looks bright. Q. Bright like what? A. I don't know what it is, looks bright. Q. Do you see any person? A. Yes sir. Q. Do you know the person? A. I've seen the person before, I dont know him very well. Q. Are you still looking at that person? Think you know who that person is? A. Dont know that person's name. Q. Lady or gentleman? A. A gentleman. Q. Do you see any other person? A. Yes sir, I see another person. Q. Do you know that person? A. No sir. Q. What sort of place do you seem to be in? A. A room. Q. Do you see any other person but the one? A. I see a lady. Q. Tell me who that lady is, can't you tell the lady's name? Q. Do you see her dress? A. Dark colour. Q. Do you see the lady more distinctly than you did? A. Yes sir. Q. Think now that you know her? A. I think I know her. Q. Think you know her name? A. No sir. Q. Do you see her distinctly enough to be sure you dont know her name? A. Yes sir. Q. Do you see any other person besides that lady? A. I see a gentleman. Q. Do you see him distinctly? A. No sir, not distinctly. Q. Do you see him more distinctly than before? A. Seems to be behind something, cant see him distinctly. Q. Do you see any thing else there? A. No sir. Q. Do you see any other people

there? A. No. sir. Q. Will you go to another place? A. If you wish to go.

No. 3.—*Same gentleman.*

Q. Do you see any thing now? A. Seem to be standing on something. Q. Please tell me if you see any thing or person there! A. I see a person. Q. Do you see the person distinctly. A. I see a gentleman. Q. Did you ever see that gentleman before? A. Yes sir. Q. Do you think you know him? A. No sir. Q. What does he seem to be doing? A. I don't see that he is doing any thing. Q. Do you see any other person? A. No sir. Q. Look closely and see if you can? A. No sir. Q. Do you see the same gentleman? A. Yes sir. Q. Sitting or standing? A. Standing. Q. Do you see any thing else? A. I see something that seems to be on the Wall. Q. I'll look at the object, and if you can see any thing tell me. A. I see something that seems to be moving. Q. Do you see any thing else? A. I see something that looks like a painting. Q. Do you see that person that you saw a while ago? A. No sir. Q. Do you see any one? A. I see a gentleman. Q. Do you know him? A. No sir. Q. Do you see him distinctly? A. No sir.

No. 4.—*Same gentleman.*

Q. Do you see any thing before your mind now? A. I see something like water. Q. Please to look closely at it, and tell me if you see any thing else? A. I see something like a room there. Q. Any body in it? A. There's a person in there. Q. What does the person seem to be doing? A. There seems to be something the matter with the person. Q. A gentleman or lady? A. A gentleman. Q. Look closely at him, and see what he's doing. A. I don't know what he's doing. Q. Do you know him? A. I do not. Q. Do you observe any other object. A. No sir.

No. 6.—*Mr. C. D.*

Q. What do you see? A. In a room. Q. A large one? A. Yes, a number of persons. Q. Sitting or standing? A. Sitting; one now standing. Q. Are we still or walking? A.

Still. Q. Is it light or dark? A. Light in back part more than in front. Q. What do you see? A. Person seems to be laying down. Q. Is the room dark? A. Dark at that end. Q. What appearance now? A. I don't see anything; dark. Q. How is it now? A. It seems to be light. Q. See anything but a room? A. Not in a room now. Q. See anything? A. Seem to stand on something bright. Q. Quite high? A. Yes. Q. Standing still or going? A. Not in a room; seem to be walking. Q. Now see anything? A. Something off there like water. Q. Are we near it? A. Yes.

Nos. 7 *and* 8.—*Same Gentleman.*

Q. Is my dress changed any? A. Long dark dress. Q. What do you see? A. Something like a light. Q. Where are we? A. Seem to go under some long place. Q. Anybody with us? A. Yes, but looks dark. Q. What are they doing? A. Kneeling down. Q. Look again; any difference? A. No sir. Q. Let's return. What way are we returning to Louisville? A. By land, not water. Q. What conveyance? A. In something goes fast. Q. How does the road seem. A. Small, narrow, dark on sides.

No. 9.—*Same Gentleman.*

Q. Returned—where are we now? A. In a room. Q. Large or small? A. Large. Q. Any persons? A. Yes. Q. Many? A. Don't know. Q. Still or moving? A. Moving and talking. Q. See any person you ever saw before? A. Yes, the gentleman who was talking with me just now. Q. Any ladies? A. No.

No. 10—*Same Gentleman.*

Q. Anything in my hand? A. Yes, a book. Q. What kind? A. A dark one. Q. Large or small? A. Small. Q. Its color? A. Dark. Q. Any ladies in the room? A. No ladies, only gentlemen.

No. 11.—*Mr. E. F.*

Q. Are you tired of sitting up? A. No sir. Q. How long since you came to Louisville? A. I don't know. Q. Trav-

elled about it much? (No reply). Q. Do you prefer the city or the country? A. If the person likes it best I do. Q. How do you like the scene before us now? A. Don't see anything before me? Q. How do you like the appearance now? A. It seems to be dark around us. I do not see anything distinctly. Q. Which of those things before us now do you think most beautiful? A. I don't see anything at all. It appears to be dark. It don't seem to be in a room. Q. Can you distinguish nothing? A. No sir. Q. What seems to be the reason? A. I don't know sir. Q. Is it not light enough for you to see the difference between land and water? A. I can't see distinctly. Q. Does not that look like water? A. It doesn't look like water.

No. 13.—*Same Gentleman; No.* 12 *repeated.*

Q. Do you observe anything now? A. No sir. Q. Can you tell where we are? A. We seem to be in a room. Q. What do you see? A. Nothing; my mind seems to be dark; there is nothing before it. Q. Do you see no person in the room? A. No sir. Q. Do you see no furniture? A. No sir. Q. Well! look attentively and see if you can't discover something. Q. What kind of a room does it seem to be? A. A very long one. Q. Do you see nothing in it? A. Yes sir; a person. Q. What does he seem to be doing? A. He seems to be sitting down. Q. Do you see nothing else in the room but the person? A. There are other things in the room, but I don't see them distinctly. Q. Well! examine them carefully. Do you see no article at all? A. I see something in the room that seems to be large and dark. I can't see it plainly. Q. Do you see anything on the walls? A. I don't see the walls. Q. Why do you think it is a room then? A. It seems to be more like a room than anything else. Q. Do you see anything like a carpet? A. I don't know what you mean by a carpet. The floor seems to be hard. Q. Do you see any chairs? A. No sir. Q. Do you see any stove or fire place? A. No sir. Don't see anything that looks like fire in the room. Q. Do you see more than one person yet? A. No sir, I see only one person.

No. 14.—*Same Gentleman; being a repetition of the last.*

Knows the gentleman. Q. How do you like the appearance of what we are looking at now? A. We seem to be out of doors. Q. What do you see before us now? A. It seems to be very high. Q. What does it seem to be? A. I don't see it distinctly; there seem to be trees there. Q. What do you see now? A. I see something moving. Q. What do you see now? A. Something before us that seems attached to something—different colors on it. Q. What do you see now, anything different from the last? A. No sir; I see that same thing. Q. What do you see now? A. I see persons. Q. What do you see now? A. I see something that looks like water.

No. 15.—*Same Gentleman.*

Q. What do you see now? A. I don't see anything now. Q. Do you see anything now? Do you not see any part of it now? A. No sir. Q. Nor now? A. No sir. I can't see anything. Q. Do you observe anything now? A. I see something of different colors; I don't know what it is. Q. What do you see now? A. I don't see anything at all. It seems to be dark. Q. Do you hear anything? A. No sir. Q. Do you see anything now? A. No sir, I don't see anything at all. Q. I think you can't fail to see whether it is night or day, the thing now before my mind. A. I see nothing before my mind. Q. Well! what do you see now? A. I don't see anything. Q. What seems to be the reason that you don't see anything now? A. I don't know sir.

No. 16.—*Same Gentleman; the last repeated.*

Q. Do you observe anything now? A. No sir. Q. What do you observe now? A. I don't see anything at all. Q. Do you see anything now? A. No sir.

No. 18.—*Mr. G. H.*

Let's go somewhere else. Q. What do you see now? A. Looking into a room. Q. What do you see? A. Something like a painting. Q. What are you now looking at? A. Something; one side looking like a figure. Q. What sort? A. A

person. Q. What am I now looking at in the room? A. Something dark. Q. More than one? A. Yes, many. Q. Anything like them before? A. One looks like a head.

No. 19.—*Same Gentleman.*

Let us get out of this little room; I'm tired. Q. What looking at now? A. In a room. Q. Is it larger than the other? A. A different kind of room. Q. How arranged? A. Nothing in the centre; many around. Q. Describe them. A. Don't see anything distinctly. Q. Look again. A. See a number. Q. What like? A. Lower parts white; seem to be round; nothing like them before. Q. Look again in this big room? A. Persons; a great many. Q. Young or old? A. Young and some old. Q. Any ladies present? A. See only two. Q. What at this moment? A. Something dark going round. Q. Anything on what is going round? A. Don't know. Q. Describe it. A. Don't see it distinctly. Something bright projecting from the side. Q. What is on the thing moving round? A. Can't see it distinctly.

No. 21.—*Same Gentleman.*

Let us get back over the mountains. Q. What do you see now? A. Seem to be in a room, large. Q. Ever here before? A. Yes. Q. See a number of things? A. Yes. Q. What is most interesting? A. Don't see anything—something like a painting. Q. What else? A. No particular object. Q. Anything now? A. A person standing by something. Q. Gentleman or lady? A. Gentleman. Q. What is he standing by? A. Hand resting on something, light and bright at sides. Q. What are the persons doing? A. Sitting down. Q. What are they doing? A. Can't see. Q. Getting tired of this little room? A. It's not very small. Q. Any more persons? A. See but one. Q. Ever been here before? A. No; I thought I had, but think I have not.

No. 22.—*Same Gentleman.*

Q. Let us walk a little. A. Yes. Q. What do you see? A. Nothing. Q. Try again. A. See nothing at all. Q. Tired of me, are you not? A. Seen so much. Q. What do you

see? A. Some persons in a room, light, some noise. Q. What is most prominent? A. Something standing in the room, with something over it. Q. Look again, something worthy of your attention. A. Don't know what.

No. 24.—*Same Gentleman.*

Q. What am I looking at? A. Something like a house. Q. What is it? A. Don't see it distinctly; seems high. Q. Look again; what like? A. Don't know; don't see it distinctly. Q. Have you seen it before? A. Yes—like it? Q. Look again. A. Don't know.

No. 25.—*Same Gentleman.*

Let us get off from that object. Q. Are you tired? A. Yes, of looking. Q. I'll take you but to one object more, and not far off. Q. What am I looking at? A. Trying to think. Q. Look again. A. Seem to be standing in a small place. Q. What object? A. Something moving. Q. Look again. A. Stationary now. Q. What sort of object? A. Large and of different colors. Q. Ever see it before? A. No.

No. 28.—*Mr. I. J.*

Q. Now where are we? A. Out of doors. Q. What do you see? A. A building there. Q. Tell me what you see, what sort of a building? A. Don't see it distinctly. Q. see any people? A. A number of people seem to be standing upon something.

Nos. 30 *and* 31.—*Mr. K. L.*

We'll turn our backs and look at something else. Q. Now what do you see? A. Some persons there. Q. What does it look like, a building, or what? A. Open on the sides. Q. Well, we'll walk a little further. What do you see? A. Something like trees. Q. Any thing above the trees? A. Something never saw before; looks bright. Q. What to the left hand? A. A low building. Q. What to the right? A. Something like water. Q. To the extreme right? A. Looks dark. Q. Does it look large or small? A. Large. Q. Look like a building? A. Does not, never saw any thing like it.

Large, dark, open in front, level on top, looks smaller on top, but don't know. Q. See any hill or plain? A. A hill to the right.

No. 34.—*Same Gentleman.*

Well! we'll go into another part of the building. Q. What do you see? A. Something dark moving round. Q. See any persons? A. Seem to be standing, hold something in their hands. Q. How are they dressed? A. Light colored dresses. Q. Anything on their heads? A. Something dark, long, turns down. Q. What in their hands? A. Can't see distinctly, something colored. Q. How do you like the jaunt to England—a pleasant voyage? A. Yes. Q. Suppose we return to the United States. A. Yes.

No. 35.—*Mr. M. N.*

Let us make an excursion and view some objects. Q. What are we approaching, what do you see? A. Some persons. Q. Where are we now? A. Seem to be standing on something now. Q. What do you see around? A. Seems to be a great many things, nothing distinctly.

No. 36.—*Same Gentlemen.*

Let us move a little further. Q. Where are we now? A. Seem to be in a room. Q. We're still moving, where are we now? A. Seem standing, now, before something. Q. What do you particularly observe? A. Something seems to be hanging up. Q. Where are we now? A. Go so fast I can't say. Q. What do you see now? A. Don't see distinctly, looks bright to me. Q. Where are we now? A. Seems to be a figure there of something, we are standing. Q. What do you see now? A. Don't see anything distinctly.

No. 37.—*Same Gentleman.*

Q. You're tired of this excursion, are you not? A. No, but I can't see distinctly. Q. What do you see now? A. A building. Q. What sort? A. A dark colored. Q. Is any thing coming towards us? A. Yes, something dark.

No. 39.—*Same Gentleman.*

Q. Where are we now? A. Standing in a small place, number of things round us. Q. What do you particularly remark, what's that in the middle of the place? A. Seems to be round. Q. What does it look like? A. Don't know what, something, a kind of animal. Q. What is that doing, in the middle of the place where we are? A. Seems to be moving round.

No. 40.—*Same Gentleman.*

We'll go to another place which will interest you very much. Q. What do you see before you? A. Seem to be in a large place, something round before us. Q. What is it? A. Something like a building, don't think it is. Q. Where are we now? A. Looks like a room now. Q. Where are we now? A. Seem to be standing in some place. Q. What is right before you there? A. Don't know, don't see it distinctly. Q. Look farther! A. Seems to be high. Q. A little beyond, a few steps, what do you see? A. Seems to be moving down.

No. 41.—*Mr. O. P.*

Q. In what direction are we moving? A. Can't tell. Q. Are we going up or down? A. Up. Q. What is the surrounding scenery? Tell us what you see in looking round? A. See something that seems to be moving. Q. What sort of motion? A. I can't describe, seems to go up. Q. Is it all in one direction? A. sometimes a little down and then moves off. Q. Is there any other object? A. Something seems to be moving round. Q. Any interest about it? A. Moving round with something bright about it. Q. Look beyond and describe! A. Something like a house. Q. I want to bring an object of a clear and distinct kind, try to see it. A. Something light colored, seems very pretty, rather large, not very high, something in the centre. Q. Describe that in the centre! A. Seems to be rather tall, comes out rounding on the sides, singular, never saw it before. Q. Any peculiar color? A. Two or three, blue, more like that than any other.

Q. Are we in a house or not? A. Not in a house. Q. How is it? A. Something over us, not a house. Q. Well, we'll change to another part, tell me what you see, see anything? A. See different colors, and something at the side of us like a dog. Q. Look just before you, rather look low than high, and describe the object. A. Seems to be long. Q. Do you see any persons? A. One person, standing on that thing. Q. Moving or stationary? A. Still, and something in his hand, seems to hold it out left side. Q. Anything on the right? A. Something high. Q. Any men about them? A. Three. Q. Using their arms? A. One hanging down, the other hand raising it up.

No. 44.—*Same Gentleman.*

Let us go in and first examine the floor. A. It is hard, not like wood. Q. What like? A. Stone. Q. What color? A. Brown. Q. All of one color or more? A. Color that looks white. Q. Tell on the right hand wall what? A. Something hanging up like figures. Q. What on the left? A. Goes in and looks open. Let us enter the right-hand apartment, and then look at the floor and tell me what it looks like? A. Seems to be white. Q. Cast your eye all over and describe the room; what is there worth speaking of? A. Something on the side that sticks out, left-hand side, something bright on the right-hand side that hangs down. Q. I'm fixing my mind on a particular matter, do you see anything distinctly? A. Something before us of different colors. Q. Tell us the colors. A. Seems white, and like a red and a dark, a dark color, not exactly red. Q. What does it look like? What intended for? A. Don't know what it is. Q. We'll go further on, we've now another object, tell me what it is? A. Seems to be a figure of something. Q. Is it a male or a female? A. A female. Q. When you speak of a figure, do you mean a painting or a piece of statuary? A. A statue. Q. Now another object, do you perceive it? A. Not distinctly. Q. See it any better? A. Something over the top, looks like a painting. Q. Look smooth or rough? A. Rough. We'll go further and see another object, do you see it? A. Yes.

Q. What is it like? A. I do not understand. Q. Are you tired? A. No, but don't see distinctly. Q. Something before me quite interesting, do you perceive it? A. Seem to be in a room now.

No. 45.—*Mr. Q. R.*

Q. Do you see anything before you? A. Don't seem to be in a room. Q. Do you see anything before or around you? A. Something high, but not a building. Q. What seems before you now? A. See some person.

No. 46.—*Same Gentleman.*

Q. Let us walk further; see anything now? What does it seem to be? A. Can't see distinctly. Q. Appear to be water? A. See water there. Q. Anything about it? A. That side something above the water of different colors?

No. 47.—*Same Gentleman.*

We have a pleasant walk before us now. Q. Do you see anything pleasant? A. Going into a small place. Dark there in the front part. Q. See anything there? A. Gone into a small place, dark; seem to be looking at something. Q. Can you describe it? A. Seems to be something round. Q. Can you see what is in it? A. Dark, round sides, seems to be bright.

Nos. 48 *and* 49.—*Same Gentleman.*

Q. We'll walk again; a new scene. A. Yes. Q. We have a pleasant prospect now; do you see anything? A. Something like water; see a building. Q. What's its appearance? A. Rather singular form, something goes round. Q. Do you see the water now? A. See water. Q. What do you see? A. Something there; think they are persons—two. Q. Where are we now? A. Like a room, long. Q. What do you see? A. Something bright above, going down before. Q. What now? A. Don't see that distinctly. Should think we are in a room. Q. Can't you see? Look if there be anything before us? A. Something long like a table, high, raised up; something white over it. Q. Do you hear anything? A.

Like striking and talking. Q. What kind of noise? A. Loud. Q. See anything now? A. Something like a man. Q. See anything? A. Something that side of the room seems to be red. Q. What does it look like now? A. Seems to be long. Q. We'll change and go out of this room; see anything before us now? A. No sir, don't see it distinctly. Something seems to be hanging up there. Q. See something now? A. See something white there going across; see persons there. Q. What are they doing. A. Seem to be standing; now stooping down.

No. 50.—Same Gentleman.

We shall not be able to walk long this evening; must change now and go to another scene: Q. See anything now? A. Seem to be going up—walk. Q. Have you ever been here before? A. Yes, I think I have; seem to be still now. Q. What strikes you now? A. Something very high; seems to be noise there; moving; building there the other side. Q. See anything striking beiore you now? A. Something; looks very singular. Q. What does it look like now? A. Seems to be something painted. Q. See more than one before you? A. Yes, three not alike. Q. What have you before you now? (No answer). Q. Same as before. A. Not distinctly; something seems to be standing up. Q. What does it look like? A. Figure of something. Q. What? A. Like a person; top part seems large; something else about it; seems to be something round it. Q. Do you like to look at it? A. Is pleasant; something over the top that don't look pleasant. Q. What is your eye directed to now? A. Should think it a person. Q. Appear to be moving or still? A. Standing still; sometimes moving. Q. See it distinctly? A. See the person distinctly; something over the head of it. Q. See anything else? A. No sir. Q. Look now and see if you recognize anything. A. Don't seem to be in a room. Q. Where do we seem to be? A. Seem to be standing in a place; something over us. Q. What seems before us? A. Seems dark. Q. Seem to be moving? A. Moving; dark. Q, See anything now? A.

Something on the side of it, bright, dark round it. Q. See anything distinctly now? A. No sir, nothing now.

MANNER, LANGUAGE AND STYLE OF HER ANSWERS.

The record of questions and answers submitted to the committee has been carefully examined, and the first remark they have to make upon it, is that the somniloquist seems to have been silent except when she was addressed, as they no where find a single observation made by her, but in reply to a question, or in consequence of a remark made by the gentleman in conversation with her. This taciturnity shows itself still further, in the brevity of her answers, which were generally limited to the enunciation of a single idea, or conception of the mind, which in every instance, except two or three, where a leading question was put in relation to sound, involved visual perceptions only. In comparing or uniting her answers on the same topic, it is obvious, that she seldom had a clear conception of it; and they scarcely find any evidence of her perceiving the relations of the different members of any group. Nearly one hundred of her replies were entirely negative; in quite as many more, she saw something, but too indistinctly to give any account of it; in a great many cases, her enunciation of an object was prefaced by the expressions, "looks like;" "resembles;" "seems like;" "appears as if;" and "seems to be;" when she answered in a more confident manner, the reply does not in general extend beyond a single quality or characteristic of the object, such as color, form, position or motion, often imperfectly or partially expressed and scarcely ever referred to an absolute standard. Thus her vocabulary is barren, and her style eminently vague and obscure. In a great number of cases her answers, of course, are susceptible of various applications and interpretations; and it is obvious to the committee, that in many instances, she herself did not make an application of the qualities or characteristics which she announced to any particular object. The committee have not been able to discover any connexion between the distinctness of her answers and their truth, for

some of the most obscure and even negative, relate to the objects which were really present in the minds of the gentlemen conversing with her, or actually before their eyes; while some of the most explicit, refer to other objects than those which occupied their attention. The catalogue of subjects exhibited in the analysis just given, must be admitted to present a great variety, but there is by no means a corresponding variety in her answers. On the contrary, they are abundant in set phrases. Among these the committee find, and may cite—"the figure of something;" "a small place;" "something moving;" "something moving round;" "something that looks dark;" "something white;" "something painted," or of "different colors;" "something that looks bright;" the last of which the committee have counted fourteen or fifteen times, while many of the others recur eight or ten times. "A person" or "persons" occurs about thirty times, generally when they were present, but did not make more impressive parts of the group than things; a "house," "building," or "room," occurs twenty-three or twenty-four times, seventeen of which, it should be stated, correctly, the remainder erroneously; and in a few instances she made no allusion to either, when it should have been done. She announced water four times when it was present, four times when it was absent, and failed to indicate it four times, when it made a part of the landscape. Once she saw it after a leading question, twice failed to see it under a leading question, and once under a leading question she heard it. In all cases, except one or two, she was confused and uncertain as to its appearance and extent; which, however, was the case with almost every other object. Her answers generally presented something which could be applied to familiar scenes and objects, but not to those of a remote and uncommon kind, in which houses, furniture, and persons were not the principal matters. Hence she said nothing which was applicable to the boat-scene on the Lakes, the excursion on the Ohio, the walk on Santa Rosa Island, or the descents into the Mammoth Cave.

REPETITION OF THE SAME SCENES.

This accidentally occurred with several of them. Thus, No. 19 was presented by three different gentlemen; Nos. 37, 38 and 39 by two; No. 4 by two; No. 9 by two; No. 12 three times by the same gentleman, and No. 15 twice by the same; affording an opportunity of comparing her accounts to different gentlemen, or to the same at different times, of no less than eight scenes. A reference to the numerical catalogue will afford an index to these cases, the study of which is vitally connected with our inquiry; for while identity of answers, on the same scenes, to different gentlemen, would establish the reality of their mental influence on the somniloquist, diversity, would of course, go to prove it an illusion. The committee have carefully compared these answers, but do not feel it their duty to state the conclusions to which they have come.

MODE AND EFFECT OF QUESTIONING.

Although the members of the association had subscribed a promise, not to put leading questions, until the influence of others had been exhausted, still the committee have discovered that most of the members, no doubt unintentionally and unconsciously, did put questions, calculated, not merely to elicit an expression of the state of mind of the somniloquist, but to modify it. Thus, when she answered—"a watch," "a book" or "a building," she was questioned concerning its form, size, color and other characteristics, and of course gave some account of it, which was as full when that was not the object which the gentleman had sought, mentally, to present to her, as when it was. But it was especially in reference to change of object, or locality, that this mode of interrogation occurred. Thus, no less than forty questions or remarks appear in the record, which could not fail to suggest such changes.

The committee wish to refrain from all speculations on the influence of such interrogatories and remarks; but they may

be allowed to state as a fact established by the record itself, that in the cases in which replies of the most positive kind, whether true or false, were given, this mode of questioning was most apparent; while answers of a negative character were oftenest returned to questions, which could suggest nothing to the mind of the somniloquist or those around her.

All which is respectfully submitted.

DAN. DRAKE,
L. P. YANDELL,
Committee.

Louisville, February 8, 1844.

ART. II.—*Cases of Dyspepsia successfully treated on the purgative plan.* By WILLIAM M. YANDELL, M.D., of Benton, Mississippi.

The cases of Dyspepsia about to be described are clearly referrible to a miasmatic origin. In this form of the complaint, the liver is disordered, frequently enlarged, generally more or less tender to the touch. The secretion of the stomach is deficient or perverted. It follows badly cured cases of fever, or attacks persons living in malarious districts. Diet in this form of dyspepsia is of little avail. Exercise moderates the symptoms, but does not subdue them. Tonics are mischievous. The countenance of the patient is sallow; his appetite is often good, or even excessive. He has headache, constipation, furred tongue, cardialgia, peevish temper, or gloomy; and as it advances, the heart becomes troubled with palpitations, and the nervous system falls into paralysis: or if there be a predisposition to tubercles, the patient falls a victim to pulmonary consumption.

CASE I.—Mrs. A., aged about 23 years, was brought to my house in February, 1839, in a carriage from a distance of 40 miles. She had been confined to her room for four years, most of the time unable to walk across the room without as-

sistance. Her symptoms were as follows: skin very sallow, dry and constricted, with alternate flushings and chilliness, burning in the hands and feet, pain in the head, eyes of a muddy red complexion, with an unnatural fierceness; wakefulness; a dry cough; pain in the breast, low down, and extending round to the scapula; variable appetite, and all substances taken, even cold water gave pain; palpitation of the heart; constipation; pain in the region of the kidneys.

I thought I saw in these symptoms a call for the use of remedies that would promote the secretion of the liver; accordingly I gave her 40 grains of calomel. In the morning, no action from it. Gave her six pills of scammony, aloes and rhubarb. The effect was two scanty, rather dark colored discharges.

The night following, I gave her 80 grains of calomel, and in the morning eight pills of the above composition. Discharges were five or six in number, consistent and of dark color. This plan was kept up—calomel at night, and the pills in the morning—for eight days, at the end of which time her mouth had become slightly sore. The calomel was then laid aside, and the pills continued, which maintained the action of the bowels, but not so freely. Her gums were well in a few days, and she was put upon the use of pills of cal., al. and rhu., each two grains, every night, to be taken in doses of from six to twelve. This course was persevered in for seven weeks, the pills being repeated in the morning, if they failed to act sufficiently. At the end of this period, her discharges had become natural, her digestion good, and her strength greatly improved, insomuch that she was able to ride home on horseback in more comfort than she travelled to my house in a carriage. In two weeks after she began to take the pills her rest at night became comfortable. In this case I tried tonics, but found them to aggravate all the symptoms. Coffee was one of the most disturbing articles that she could use. Besides the pills, she took carb. sod. or potas. when troubled with acidity; and except this, she relied upon the pills alone. She returned home in seven weeks, with pills to be taken *pro re nata*, and

under their use continued to improve daily. I saw her in the fall, seven months afterwards, and she was then enjoying excellent health, with the fresh complexion of a girl, and weighing 140 pounds.

Case II.—I was requested to visit Mrs. L., aged about 22, in March, 1839. Her health had been declining for a year or two, about which time she had an attack of bilious fever. I found her greatly depressed in spirits, complaining of vertigo and head-ache, palpitation of the heart, acidity, sleeplessness, dry cough, pain in the lower part of the chest, extending towards the scapula; enlarged spleen; dry skin, of sallow appearance. At times she felt pain in the region of the kidneys. Her tongue was slightly coated, bowels costive, or the reverse.

My first prescription was calmel 25 grains, to be followed next morning with pills of al., scam. and rhu. She objected to both remedies, alleging that calomel always salivated her, and that she could not swallow pills. I explained my purpose in administering these medicines to be, to bring away dark-colored passages, and assured her that with this result, she would find herself greatly relieved. Finally she consented, and the calomel was taken at night, followed by powders of the same ingredients as the pills next morning. As she feared, a slight soreness of her gums was the consequence of taking the calomel. She persevered in the use of the powders for some time with manifest advantage: but they were so disagreeable that she discontinued taking them too soon, and the consequence was a return of the most distressing symptoms, particularly of the pain in the lumbar region. Another physician was called to her in my absence, who pronounced her case a disease of the uterus, for which he put her upon a course of medicine. Having given the remedies for the supposed uterine disease as full a trial as the physician himself deemed necessary, and having continued to decline until her friends gave her up to die, her husband prevailed on her to return once more to the use of the powders. They brought off dark discharges, and she improved in health, until she was

able to walk about the house, and in this state passed through the winter. As warm weather returned, she began to decline again, and I was once more requested to visit her. My prescription was the same as at my first visit: to-wit, 30 grains calomel, to be worked off by the powders. The result was, as in the first instance, a slight ptyalism, but much subsequent relief, as she voided a large quantity of dark, vitiated matter from the bowels.

She did not long persevere, however, in the use of the powders, the dose necessary to act being large, and the medicine exceedingly nauseous to her; and when she discontinued, the symptoms of her old malady reappeared. In a short time after abandoning them, she was confined to her bed, and became so much emaciated that her weight was only 68 pounds. For six weeks she was not able even to turn herself in bed. After returning to the powders again, which she did as the last resource, she became able to sit up in bed, in the evening, after her bowels had been moved in the morning; for she entered upon the use of the purgative when her debility was at its height. The purgative plan was kept up for three months. When the powders failed to act, I gave her a little calomel or blue pill to excite the liver gently, and I was interested to observe that the oftener the mercurial was given, the slighter was the ptyalism induced by it, until this effect ceased altogether. At the end of three months, she was able to leave her room, and by an occasional dose of the powders through the winter, her health progressively improved. She is now (January, 1842), in excellent health, having increased in weight from 68 to 118 pounds.

In this case, I tried tonics and stimulants, but found that they invariably aggravated the symptoms. Blisters were also tried, but with no better results. For six weeks the patient lived on gruel alone. Carbonate of soda acted benignly when acid was present in the stomach, relieving the flatulence which was more troublesome than ever I saw it. The alkalis are valuable remedies for this indication, and harmonize well with the purgatives.

I give calomel more freely in dyspepsia than is recommended by authors, and I have found it a most efficient remedy. It promotes the free secretion of the liver, upon the want of which dyspepsia often depends. I have never salivated a patient severely, and have seen the soreness of the gums disappear whilst the patient was taking pills of cal., al. and rhu. every night. My plan is to administer a full dose—from 12 to 20 grains generally in the beginning, and to follow it with the same article, combined with the dry vegetable purgatives, on the next evening, and to continue the purgatives until the patient is cured. If anything be required to aid the calomel in its action, I prescribe aloes, rhubarb and scammony. According to the view of the disease which I have adopted, the cure depends upon the free action of the liver, and this is maintained by the vegetable cathartics after it has been fully established by the mercurial. It may become necessary occasionally to add a little calomel or blue pill to the other purgatives, should the bilious secretion become languid.

Louisville, 1844.

ART. III.—*Extirpation of a large part of the Superior Maxillary Bone, on account of a Schirrous Tumour developed in the Antrum.* By Dr. F. G. DEL VALLE. Translated from the Spanish by the Junior Editor.*

Seraphina N., negress, 18 years old, field-laborer, of common stature, lymphatico-nervous temperament, entered the Hospital of St. Francis, in Havana, towards the end of August, 1842, with a tumor occupying all the left side of the face, covered by the common integuments which were much distended but healthy. The tumor was as large as a common orange, filled the whole mouth, and viewed from the side, projected forwards an inch beyond the upper lip. Anteriorly it was about three inches in diameter, with a cor-

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* We are indebted to the *Repertorio Medico-Habanero* for this article. C.

responding circumference, which was ulcerated and contained three incisor teeth. The tumor extended along the alveolar process, as far as the right canine tooth, and backwards to the posterior part of the palatal arch on the left side, giving room only for the last two molar teeth, which were firm and healthy, and leaving free the palate bone of the same side, and a small portion of the maxillary with which it articulates. Superiorly, it rested below the cheek-bone (*pómulo*), and four lines below the orbit, in the direction of the nose, projecting outwards in an extraordinary manner, and turning upwards and to the right, giving a most disagreeable and frightful aspect to the countenance." The tumor was hard, one part of it a deep red color, the other of the natural color of the mucous membrane of the mouth; it was covered with a multitude of tortuous vessels in a dilated and varicose state, it did not yield upon pressure, the pain was not very severe, and nothing issued from the ulcerated portion. The tonsils and cervical glands remained healthy, as well as the tongue and adjacent parts; mastication was very difficult and speech almost unintelligible.

An inquiry into all the circumstances connected with the appearance and development of the disease, showed only that two years previously the patient had received a kick from an ox on the side of the face, which no doubt fractured the superior maxillary bone—no other cause could be discovered. In view of the time that had elapsed, the symptoms present, and the visible organic lesion, I did not hesitate to class it as a schirrous tumor and probably an osteo-sarcoma of the maxillary sinus. The only remedy, therefore, was extirpation, which would involve the greater portion of the maxillary bone, and endanger the individual's life. A consultation was held, at which were present Professors Gutierrez, Castro, Jorrin, Bodman, Pinelo, and A. Valdes. Various reflections were made concerning the nature of the tumor; some suspected it to be aneurismatic fungus, and proposed tying the carotid previous to the operation. A majority decided that this was unnecessary, since there would be no difficulty in controlling the hemor-

rhage during the operation; all agreed as to the absolute necessity of extirpation, without which the death of the patient was inevitable.

On the appointed day, everything being in readiness, I proceeded to remove the tumor, in the presence of a number of Professors and students of the school of medicine. The patient being placed on a firm seat, with the necessary light, the arms and legs bound for greater security, and the head resting on the breast of an assistant, I began by making a curved incision which divided the integuments and muscles of the face, from a point in the zygomatic arch, an inch from the outer angle of the eye, to the commissure of the lips; three arteries presented themselves, and were secured by Dr. Gutierrez. I then dissected up the cheek as far as the orbit, and anteriorly, in order to display the tumor; lifted the nose upwards, separating it from the alveolar border; applied the saw horizontally to the inferior part of the malar bone; then with a chisel and mallet divided the ascending process of the superior maxillary, at its junction with the nasal and near the ungual bones; next the canine tooth of the right side was extracted, the nasal cartilage and the vomer were cut with sharp scissors, and with the forceps of Liston the alveolar arch was divided at a single stroke as far as the nasal fossae. Afterwards Dr. Gutierrez, with the same forceps applied before the second molar, cut into the maxillary sinus; the palatal arch was then divided by means of a strong curved knife, cutting from within outwards. The tumor being now circumscribed and movable was lifted out with very little force, leaving only many portions of lardaceous nature adhering to the internal and posterior surface of the antrum, and to the left turbinated bones; these portions were all separated by means of the fingers and instruments, during which it became necessary to extract the last two molars which had been suffered to remain, as the alveolar border where they stood was evidently diseased. The arterial hemorrhage was restrained by means of torsion, and lotions of cold water constantly applied, with-

out resorting to the actual cautery which was in readiness. After waiting a moment, for the assistants to assure themselves that the morbid mass was removed and the vessels secured, the soft parts were brought down, and retained by three interrupted and one twisted suture, assisted by strips of adhesive plaster, dry lint internally, cribriform compresses, bandages, &c.; the patient was then carried to bed, and ordered a slightly anodyne draught, with tepid water and sugar as the only aliment.

On the third day there was fever, slight coma, profuse ptyalism, with fetor, and pain of the face: the anodyne was suspended, warm pediluvia and sinapisms were directed, with sweetened water for nourishment. The patient continued in the same state until the fifth day, when diarrhœa supervened, apparently in consequence of the water drank. An opiate was ordered with toast water in small portions every four hours. The dressings were now removed for the first time, and the wound presented a good aspect.

Internally it was washed with barley-water, slightly acidulated, and then dressed with dry lint; externally it was covered with a cribriform compress lightly spread with cerate. On the sixth day the patient was free from fever and headache; on the ninth two of the pins were removed. On the fifteenth the external wound was perfectly united, the three ligatures on the arteries still remaining; the sutures were all removed, and it was dressed with dry lint. The inflammation followed its usual course internally; some portions of the soft parts, contused during the operation, became sphacelated and were removed; tumefaction subsided after exfoliation of small pieces of bone; and finally on the twentieth day, the entire surface was free, and covered with granulations, which required to be touched subsequently with the nitrate of silver. Acidulated barley-water, weak solutions of the sulphate of zinc, nitrate of silver, and lint, generally dry, sometimes covered with cerate, were used until the time of complete cicatrization, which occurred 48 days after the operation.

As the patient is young, and the skin covering the tumor sound, the deformity is very slight, and even internally there is not so great a loss of substance as might be supposed from the enormous mass that was removed. It is true, the inferior turbinated bone, and the entire alveolar process, from the right canine to the last molar tooth, are wanting, leaving above so much only of the left maxilla as contributes to the formation of the orbit; but as there remain below four lines of the bone in its union with the palate bone, she still retains in a healthy condition a third of the arch of the palate; and by covering the hollow which is left with very fine and well compressed lint, can speak though with some difficulty; and the passage of air and food through the nose being prevented, mastication is performed with the four molars of the opposite side.

REVIEWS.

ART. IV.—*Lectures on the Principles and Practice of Physic;* delivered at King's College, London. By THOMAS WATSON, M.D., Fellow of the Royal College of Physicians, Physician to the Middlesex Hospital, and formerly Fellow of St. John's College, Cambridge. Philadelphia: Lea & Blanchard. 1vol. 8vo. pp. 920. 1844.

These celebrated lectures were delivered at King's College, London, during the medical session of 1836 and '37, and were repeated, with slight variations, for four successive years. To fulfil a rash promise, we are told by the author, it was that they were printed, at length, in the Medical Gazette. They were prepared, it will be seen, especially for students of Medicine, and they constitute, we believe it is conceded on all hands, one of the most complete systems of medical practice to be found in our language. A reprint of these lectures is now offered by Messrs. Lea & Blanchard to the profession of the United States, in a large and beautifully executed volume. It is not our purpose to give a synopsis of the subjects discussed in it, much less to attempt an analytical review of a work embracing the whole range of human maladies, their causes, symptoms and treatment. Ninety lectures, fully written, comprising all that the author has derived from his acquaintance with the best authorities in the profession and his own extensive practice, are not to be compressed, by any process known to us, into the limits at our disposal. Nor would our readers desire such a review. They will prefer studying the subjects at the full length in

which they are presented in the ponderous volume. To such however, as may not have the means of possessing themselves of the work immediately, we have supposed extracts from some portions of it might not be unacceptable. In making selections for quotation we have been governed by our own taste, and are far from being sure that we have made choice of the most valuable.

Our first extract relates to *strumous ophthalmia;* a malady especially prevalent among the colored population of our country. Our brethern will welcome any new light that may be reflected on its treatment.

"*Treatment of Strumous Ophthalmia.*—You will readily believe, from what has been said of this complaint, that it is an obstinate and troublesome one. Even when removed, it is very apt to recur again. The scrofulous *habit* on which it depends we cannot get rid of; and whenever the exciting causes of scrofulous *diseases* come into action, this form of scrofula is very prone to declare itself, at the period of life which I have already mentioned.

"More good is to be done by general treatment, applied to the system at large, in this form of ophthalmia, than in those we were occupied with before; and this is one strong point of difference between them.

"In the first place we must endeavor to correct that unnatural condition of the whole system, and especially of the digestive organs, which is commonly so striking a concomitant of the local disease. It will be proper to clear out the bowels in the outset, and occasionally, by a mercurial purge; and to regulate them at other times by laxatives, such as rhubarb, or the confectio sennæ, or castor oil. The recovery will be greatly promoted also by those measures which are found to benefit the general health in such constitutions; warm clothing, frequent ablution of the body, nourishing though plain food, the respiration of a pure atmosphere, *change* of air, and regular exercise.

"In addition to these measures, tonic medicines should be administered; the preparations of iron, for example, or the dilute mineral acids; but the best remedy of this kind is, undoubtedly, the sulphate of quina. This may be given to a child in grain doses, three times a day, dissolved in water, with a drop of the dilute sulphuric acid, and some syrup of orange peel. Dr. Mackenzie, in particular, has put this medi-

cine fairly to the test, having employed it in a very large number of cases with the happiest results. In most of his patients he declares that it acted *like a charm*, 'abating, commonly in a few days, the excessive intolerance of light and profuse epiphora; promoting the absorption of phlyctenulæ, and hastening the cicatrization of ulcers of the cornea.' And Mr. Lawrence adds his testimony to the same effect; and his experience in this disease, like Dr. Mackenzie's, has been large enough to make it highly valuable.

"A few words will suffice to explain the kind of local treatment that has been found useful. You may feel tempted to apply leeches round the eye. This is seldom requisite, except when there is more redness and pain than common, and the tongue becomes white, and the skin hot. Certainly you must not take the intolerance of light as a fit indication for the use of leeches. Abstraction of blood rather aggravates that symptom, apparently by increasing the irritability of the retina. Warm fomentations are generally very comfortable to the patient's feelings.

"When the general disorder of the system has been somewhat rectified, local stimulants and astringents are of great service. The vinum opii, and the solution of lunar caustic, are the best. These are often tedious cases, and therefore it is necessary that you should be aware of one great objection to the long continued employment of the nitrate of silver wash, which objection has been pointed out by Dr. Mackenzie. It is apt (but only when frequently repeated for a long time together) to stain the conjunctiva of an indelible olive color. For this reason the vinum opii is to be preferred in slow cases, and in cases where frequent relapses happen. The good effects of either of those preparations are very striking; they diminish the irritability of the eye, and promote the healing of the ulcers. The red precipitate ointment, and the citrine ointment of the Pharmacopœia diluted, are also found beneficial.

"Counter-irritation is another local measure, which is of undoubted utility in this complaint. A great change for the better in the state of the organ often occurs, almost suddenly, upon the rising of a blister placed behind the ear, or at the back of the neck. And issues in the arms are not only serviceable in promoting the cure, but have a marked effect in many children in preventing relapses. Mr. Welbank, in his notes to Frick's *Treatise on Diseases of the Eye*, says that he has seen chronic strumous ophthalmia, of seven years' duration, quickly and effectually relieved by an issue in the arm. Having once (says he) in the case of a boy in Christ's Hospi-

tal, directed the healing of an issue which had been made above twelve months, I found the immediate consequence to be a relapse of strumous inflammation and ulceration of the cornea, resisting every measure but the renewal of the issue.'

He suggests also (what parents are sometimes more willing to assent to) the advantage of making counter-irritation by piercing the lobe of the ear, and inserting a ring or silk; and 'a very convenient form of vesication will be found in the application of a strong thread, smeared with *emplastrum cantharidis*, and firmly tied behind the ear at the angle of its reflection.'

"When ulceration is going on in the cornea, and threatening to penetrate it, the progress of the ulcer may be checked by touching the surface once in two or three days with a pencil of lunar caustic which has been scraped to a fine point.

"When the more urgent symptoms have abated, and the discharge of hot and irritating tears has ceased, the crusta lactea may very easily be got rid of. The crusts are to be removed by a light poultice, or by warm water; and then the part must be bathed from time to time with a lotion made by mixing the oxide of zinc with water; a drachm to four ounces is the proportion I am in the habit of prescribing. If rose water be used instead of common pump water, the prescription will be thought the more *elegant*. This lotion will speedily dry up the discharge, and in a short time no trace of the ugly looking crust will remain. Parents are highly delighted and very thankful when you thus accomplish the removal of a large disfiguring and disgusting scab, which they naturally enough felt apprehensive might leave behind it a corresponding scar. But it is quite superficial."

We make no apology for introducing so long an extract, since we do not believe that we could fill our pages with matter of more decided practical value. The following quotation is not so long—it contains a suggestion never to be overlooked in cases of palsy. Our author remarks—

"There is one very common and distressing consequence of such disease of the spinal marrow as produces paraplegia, not particularly noted in any of the cases which I have related, but always to be looked for. The muscles, by means of which the bladder empties itself, are apt to participate in the palsy; and then the bladder empties itself no longer. The urine accumulates in it, and distends it, and the ureter even becomes

distended; and in this way not only the present but the prospective danger is increased. For the foundation of future disease in the kidneys is often thus laid, even when such distension of the bladder by its retained contents occurs independently of any disease of the spine; as it may do from stricture; from enlargement of the prostate; or even from the voluntary retention of the urine beyond a certain period, through feelings of delicacy. You are to look out, I say, for this distention of the bladder, and relieve or prevent it by the introduction of a catheter through the urethra. You must not be deceived by being told that the patient passes plenty of water; that it even runs from him. Incontinence of urine is, in fact, in these cases, though it may sound paradoxical, a sign of retention of urine. The urine dribbles away because the bladder admits of no further distension; it overflows, and runs out at the natural orifice, but the bladder remains constantly full and stretched. You must make an examination, therefore, of the hypogastric region with your hand. If you find that part of the belly hard and resisting, and giving out a dull sound on percussion, you may be sure, in these cases (where there is paralysis of the lower extemities, and the water dribbles away), that the bladder is full, and has lost the power of expelling its contents. Sometimes you may recognize the fluctuation of the urine in the distended bladder, and ascertain the globular shape of that organ. It will rise even beyond the umbilicus. But what I chiefly wished to point out to you is, the circumstance that the bladder becomes diseased, and the urine altered in quality, under this state of palsy. The urine becomes thick, ropy, and alkaline, and exhales a very offensive ammoniacal smell; and the inner surface of the bladder is found, after death, to be thickened, red, and covered with adhesive mucus—in a state of chronic inflammation, in short.

The facts related in the following passage, taken from the lecture on *hydrophobia* will be read with interest:

"It is curious that different species of animals appear to be susceptible of hydrophobia in different degrees. Thus, according to Mr. Youatt, two dogs out of three, bitten by one that is rabid, become rabid. The majority of horses inoculated with the virus perish. Cattle have a better chance: perhaps because in them the skin is looser and less easily penetrated. A full half (he thinks) of those that were seized by a mad dog would escape. With sheep the bite is still less dangerous.

He reckons that not more than one in three would be affected. The tooth, perhaps, has been wiped clean in its passage through the wool. The human being is least of all in danger. John Hunter states that he knew an instance in which, of twenty-one persons bitten, one alone became affected with hydrophobia. Dr. Hamilton estimates the proportion to be one in twenty-five. But I fear these computations are much too low. In 1780, a mad dog, in the neighborhood of Senlis, took his course within a small circle, and bit fifteen persons before he was killed: three of these died of hydrophobia. The slaver of a rabid wolf would seem to be highly virulent and effective. These beasts fly always, I believe, at a naked part. Hence, probably, the fatality of their bites. The following statement applies exclusively to the wolf. In December, 1774, twenty persons were bitten in the neighborhood of Troyes; nine of them died. Of seventeen persons similarly bitten in 1784, near Brive, ten died rabid. In May, 1817, twenty-three persons were bitten, of whom twelve died of hydrophobia within two months. Hence we have one hundred and fourteen persons bitten by rabid wolves, and among them no less than sixty-seven victims; considerably more than one half. There is no doubt, however, that a majority of persons who are bitten by a mad dog escape the disease. This may partly be owing to an inherent inaptitude for accepting it. We see some persons who, though often in the way of it, do not contract syphilis; there are others upon whom the contagion of small-pox has no influence. This difference exists, apparently, even among dogs. There was one dog, at Charenton, that did not become rabid after being bitten by a rabid dog; and it was so managed, that, at different times, he was bitten by thirty different mad dogs; but he outlived it all. Much will depend also upon the circumstances and manner in which the bite is inflicted; if it be made through the clothes, and especially through thick woollen garments, or through leather, the saliva may be wiped clean away from the tooth before it reaches the flesh. In the fifth volume of the Edinburgh Medical and Surgical Journal, there is a case described by Mr. Oldknow, of Nottingham, in which a man was bitten in three different places by the same dog; viz: in the scrotum, the thigh, and the left hand; the bite on the hand was the last. Now it seems not improbable that but for this last bite, on a naked part, he might have escaped. At least it was a remarkable circumstance that the phenomena of recrudescence occurred only in the hand and arm. The dog is supposed to have closed his mouth after inflicting the first two bites; and

thus to have charged his teeth afresh with the poisonous saliva.

"It is this frequent immunity from the disease in persons who have been bitten, that has tended to confer reputation upon so many vaunted methods of prevention. Ignorant persons, and knavish persons, have not failed to take advantage of this. They announce that they are in possession of some secret remedy which will prevent the virus from operating. They persuade the friends of those who die that the remedy was not rightly employed, or not resorted to sufficiently early; and they persuade those who escape that they escape by virtue of the preventive remedy. If the plunder they reap from the foolish and the frightened was all, it would be of less consequence; but unfortunately the hope of security without undergoing a painful operation leads many to neglect the only sure mode of obtaining safety."

Dr. Watson entertains the opinion common among English writers on the complaints of females, that puerpural fever is a contagious disease, and hence recommends the following precautions:

"I need scarcely point to the practical lesson which these facts inculcate. Whenever puerperal fever is rife, or when a practitioner has attended any one instance of it, he should use most diligent ablution; he should even wash his hands with some disinfecting fluid, a weak solution of chlorine for instance: he should avoid going in the same dress to any other of his midwifery patients: in short, he should take all those precautions which, when the danger is understood, common sense will suggest, against his clothes or his body becoming a vehicle of contagion and death between one patient and another. And this is a duty so solemn and binding, that I have thought it right to bring it distinctly before you."

Our next quotation relates to a disease, the first description of which was published but a few years ago. We shall devote much space to an account of this affection, assured that Dr. Watson's remarks concerning it convey information which many will be glad to receive:

"*Bright's Disease.*—Now it is quite certain that the presence of albumen in the urine does often acccompany and bespeak a very serious organic disease of the kidney. For this disease we have no appropriate name. I wish we had. Some call it

granular degeneration of the kidney, but the epithet granular is not always applicable. It is most familiarly known, both here and abroad, as *Bright's kidney*, or *Bright's disease;* after the eminent physician, who, in 1837, first described it, and showed its great pathological importance. These are odd-sounding and awkward terms; but in the lack of better, I must employ them.

"*Anatomical Characters.*—It is very difficult to describe, in words, the anatomical characters proper to this renal disease; for they are neither very definite nor very constant. The description that I am about to attempt will be made more intelligible by Dr. Bright's plates, and those of M. Rayer, which are both before you.

"The morbid appearances presented by the kidney are such as denote some change in its intimate structure. Its cortical (or secreting) portion is the primary and chief seat of this degeneration; yet what is called its medullary (*i. e.* its excreting) part, is also sometimes implicated, but in a less degree.

"These morbid appearances relate to the size, figure, and consistence of the kidney; to the color and condition of its surface, and of its interior. With respect to some of these points there is much variety in different cases; and studying this variety under the light which is thrown upon it by the clinical history of the disease, we have reason to believe that it is connected with different stages of the disorganizing process. Thus if we look to the *size* of the diseased organs, they are sometimes much larger than natural, sometimes of the ordinary magnitude, sometimes considerably smaller. The average weight of the adult human kidney is four ounces. M. Rayer has met with some, in this disease, weighing twelve ounces. Both the increment and the decrement of the natural bulk belong principally, if not altogether, to the outer secreting portion of the gland. If a longitudinal section of the exaggerated kidney be made, its cortical part is seen to be unduly broad; and the same part is disproportionally narrow when the whole organ is smaller than common. For this reason, in the latter case, the radiating medullary portions approach nearer to the surface than they are observed to do in a healthy kidney. And it furthermore appears that the enlargement is most commonly coincident with the earlier, and the contraction or shrinking with the later, stages of the renal disease.

The *consistence* of the diseased gland is variable also. Sometimes, and for the most part in the earlier periods, it is soft and flabby; sometimes, and especially in the later periods,

it is remarkably compact and hard. The size and consistence of the kidney are, in most cases, inversely proportioned to each other.

"Again, the *form* of the kidney, in the disease in question, often undergoes some modification. As the special change proceeds, the exterior of the gland shows a tendency to become indented by linear depressions, and to present a lobular shape. This, however, is by no means a constant phenomenon, even in the most advanced stages of the malady.

"When its proper investing tunic is stripped off—and less distinctly *through* the same tunic, before its separation—the surface of the kidney appears mottled, marbled, or stained, of a yellowish gray color in one place, and of a dark or purple tint in another. Occasionally it is pale throughout its whole extent; more commonly of divers hues, and variegated with little streaks, which are portions of vessels containing red blood. Sometimes the surface is curiously speckled; often uneven as if strewed with prominent grains; in some instances quite rough and scabrous. These several unnatural appearances are usually the more conspicuous, in proportion as the complaint is the more advanced.

"The most uniform, however, and the most characteristic of the morbid appearances, are those presented by the cut surface of the kidney, when it has been divided into two symmetrical portions by a longitudinal incision. We then perceive that the cortical substance is the main seat of the morbid alteration. It has lost, in a greater or less degree, its proper red color and uniform aspect. Sometimes it puts on a speckled or granular appearance; but this, in my experience, is less common than a pale, homogeneous surface, somewhat like the section of a parsnip. Its natural striæ are confused or obliterated. The incised surface gives one the notion of some deposite, whereby the original texture of the part is obscured. The blood-vessels seem, many or most of them, to have been emptied by compression, or to be blocked up by yellowish solid matters; while the healthier pyramidal masses belonging to the medullary portion of the kidney are displaced, and pushed aside, or encroached upon by the same yellowish matter, which sometimes interposes itself between, and opens out, their radiating tubuli. Together with these changes of appearance and structure, I have several times found the veins that emerge from the kidney firmly plugged up by coagula of blood.

"In some rare cases the kidney is studded, both on its surface and throughout its interior, with numerous small cysts or

cells, containing a thin transparent liquid. These cysts have been inaccurately termed hydatids. It is not at all uncommon to meet with one or two such cysts in this diseased state of the organ.

"It has been made a question whether the various appearances which I have been attempting to describe, and which sensibly differ in degree and combination in different cases, are characteristic of different morbid conditions, or merely of different stages and varieties of the same essential change. Our knowledge of the subject is scarcely sufficient to supply a positive solution of this question. Excepting perhaps the cysts, my own *opinion* is, that they are all accidental forms and effects of one and the same morbid process. At the same time I ought to tell you that both Dr. Bright and Dr. Christison appear to incline to the opposite conclusion.

"There is still another state of the kidney, very different to the eye from any that I have yet mentioned, but which has been thought, and which I think, to be, in some cases at least, the first stage of all in the disorganizing process. This state, which I referred to when speaking of suppression of urine, may be briefly described in two words—*sanguine congestion.* The whole organ is gorged with blood, which sometimes drips freely from it when it is cut open. The kidney is in general large, somewhat flabby, of a deep dark red, even of a chocolate or purplish color, nearly uniformly diffused, except that the cut surface is usually diversified by still darker tuft-like spots, which have been ascertained to be the Malpighian bodies filled with blood. This change from the natural appearance of the kidney is evidently of a recent kind; and the symptoms that have been observed to belong to it are these: Fever, preceded often by rigors; uneasiness or dull pain in the loins; nausea and vomiting; a very scanty secretion of urine, which is sometimes tinged with blood, and always albuminous; occasionally complete suppression of urine. To these symptoms there is presently added, in most cases, sudden and general anasarca—what is commonly called inflammatory, active, or febrile dropsy. If the secretion of urine be entirely suspended, death soon ensues by coma, as I explained to you yesterday; but if not, the disorder is frequently fatal by the supervention of some acute internal inflammation; pleurisy, or pericarditis, or pneumonia, or peritonitis. Many persons recover completely from the condition expressed by this combination of phenomena. Many seem to recover, but bear about with them the germs or beginnings of those more chronic and latent changes which constitute 'Bright's kidney.'

"*Symptoms.*—And what are the signs which indicate, to an instructed eye, the presence of those changes? Some of them are precisely the same, in kind, as those which denote the acuter disorder; only mitigated in degree, and of slower march and succession. The patients are subject to obscure lumbar pains; to sickness from time to time, and retching; and their urine is apt to be red, brown, or dingy, as well as albuminous, from the intermixture of some of the coloring matter of the blood. They are obnoxious to inflammations of the serous membranes also; and more particularly to head affections, of which they often die; drowsiness, convulsions, apoplexy. And, to finish the resemblance, many of them, ay, most of them, become at length anasarcous. Besides these symptoms, there are others which are not seen in the acute malady; but it is acute. Gradually increasing pallor is almost constant; disease of the heart is common; and the skin, in general, even in the absence of fever, is remarkably dry and unperspiring. The patients are troubled by a frequent want to make water; by flatulence of the stomach and intestines; and by caprice of the bowels, which are sometimes obstinately costive, sometimes prone to diarrhœa.

"Now it is worth your while to remark, with respect to this category of symptoms, that (the state of the urine excepted) they have no special *primâ facie* reference to renal disease. They are all common enough in various other complaints. In truth they are mere secondary consequences of Bright's disease; and in so far as they are symptoms of it, they are *indirect* symptoms. Before Dr. Bright no one perceived, in such symptoms, any indications of disease of the kidney. The primary and fundamental organic malady reveals itself by no indirect symptoms, excepting those which are furnished by the urine.

"*Albuminous Urine.*—Seeing, then, that this peculiar disease of the kidney is coupled with effects so grave and perilous, and seeing that one of its most positive and distinctive marks is an albuminous state of the urine, two questions of great interest at once present themselves.

"1. Does albuminous urine *always* imply the presence of Bright's disease?

"2. Is Bright's disease, when present, *always* accompanied by albuminous urine?

"To both these questions the answer is—no.

"It is certain that some articles of food have the effect, in some persons, of rendering the urine for a time albuminous: perhaps it would be more correct to say that certain forms of indigestion cause this change. Albumen has also been detec-

ted in the urine under that general state of irritation produced occasionally by mercury, or by a blister to the skin. In the crisis of some febrile disorders, and in some cases of pregnancy, the same phenomenon has been observed. Whenever blood, proceeding from any part of the long tract of mucous membrane which lines the urinary organs, mingles with the urine, that fluid of necessity contains albumen, and coagulates if tested by heat or by nitric acid.

"On the other hand, when the kidney is really affected in the way already described, the admixture of albumen with the urine is apt to disappear, for a while, even suddenly. I have known it to vanish for several hours, immediately after the effectual application of a hot air bath; and after profuse purging by a full dose of elaterium. Sometimes it is absent for a longer period.

"Another important question, therefore, now arises. Finding albumen in the urine, how are we to know whether it does or does not indicate the presence of Bright's kidney?

"We may judge, in part, by frequently testing the urine, and noticing whether the albuminous impregnation be transitory or persistent. In part also we judge by the absolute amount of the albumen in a given measure of urine. If the urine be deeply charged with that unnatural ingredient, the presumption is strong that the kidney disease is in progress, and, when that disease is confirmed, another remarkable change is found to have taken place in the urine. Its specific gravity is very low; and striking in contrast with that of diabetic urine. This is therefore a very strong additional diagnostic circumstance.

"On Dr. Prout's authority we have assumed the specific gravity of healthy urine to range between 1015 and 1025. Other writers make it higher. But the urine voided in Bright's disease is sometimes as low as 1004; and its mean specific gravity does not exceed 1013.

"I need scarcely again remind you, that the question of specific gravity must always be viewed in relation to the absolute quantity of urine secreted. The specific gravity depends, of course, upon the proportion of the solid constituents of the urine contained in a given quantity. If the aqueous portion be augmented, the effect upon the absolute density will be the same as if the solid contents were proportionally diminished. But when, as frequently happens in certain stages of this renal disease, the specific gravity decreases while the quantity of the urine decreases also, that conjunction of phenomena becomes especially significant.

"The density of the urine being thus unnaturally low, notwithstanding the addition of the new substance, albumen, it follows, as a matter of inference, that the solid constituents proper to healthy urine must be sensibly diminished; and they are found, in fact, to be so. These solid ingredients consist mainly of urea, and of certain salts. The aggregate solid contents amount, in health, to sixty-seven or sixty-eight parts in every 1000. In Bright's disease the amount has been ascertained to be diminished to twelve or fourteen parts, and even, in an extreme case, to less than this—to about six parts.

"The urine contains, then, albumen; and it is deficient in urea. These two facts suggested, naturally enough, to M. Solon, and to others, the notion that albumen might be formed by a sort of conversion, at the expense of the urea; since these substances, by a slight alteration in the ratio of their elements, pass respectively each into the other. But it is not so. Dr. Christison had observed many years ago, that when the urine was deprived of the greater part of its urea, the quantity of albumen contained in it was small; and, on the other hand, in cases where the urea was considerable in quantity, the albumen was plentiful also. In a recent work on this subject, the same physician states that the whole of his subsequent experience has been in conformity with this observation.

"It being certain, therefore, that the albumen is not vicarious of the urea, what (you may ask) becomes of the urea? It is detained in the blood; and may readily be recognized there in considerable quantity; and herein lies, as I conceive, the secret of the secondary affections which belong to this disorder, and of its great fatality. The body is poisoned in detail by the retention of its own excrements. The blood not being duly purified through that great emunctory, the kidneys, is spoiled for its purpose of nutrition. Besides containing urea, it undergoes other and more manifest changes. Its proportion of fibrine varies; and it gradually becomes poor in coloring matter; the serum is less albuminous also, and of a lower specific gravity, than in health. The quantity of albumen in healthy blood averages from sixty-five to sixty-nine parts in 1000. In this malady Dr. Babington has found it reduced to sixteen parts. The average specific gravity of healthy serum is 1030; but in Bright's disease it descends to 1024, 1020, and even to 1013. Now Dr. Christison has made out the very interesting fact, that there is a definite inverse ratio between the coagulability of the urine, and the density

of the serum. The more albumen there is in the former of these fluids, the less is there in the latter, and the lower is its specific gravity. So that the deficiencies of the one fluid balance the superfluities of the other. All this is very different from what takes place in diabetes, in which sugar is excreted with urine that is otherwise healthy; whereas, in Bright's disease, urea, which ought to be discharged, remains in the blood; and albumen, which ought not to be separated, is taken from the blood, and carried out with the urine.

"*Stages.*—I have now described the changes presented by the kidneys in this disorder, the symptoms which attend it, and the morbid conditions both of the urine and of the blood. But these all vary and fluctuate at different periods of the complaint. I must next, therefore, endeavor to state what has been ascertained by its course and progress.

"When the chronic disorder is not a legacy left by the more severe and acute form of disease which I have termed febrile dropsy, it is apt to creep on very insidiously, and to escape our notice—and its history is not fully known. It will be enough if I distinguish two stages of the malady—the early, and the advanced.

"In the early stage the urine is generally scanty. Instead of about 40 ounces in the twenty-four hours, the patient voids 16, 12, 8, or even as little as 2 or 3 ounces. Sometimes the secretion is nearly or quite suppressed; and then the head seldom fails to become affected in the way already described. The urine has also an unnatural appearance. It is red, or dark, obscurely turbid, like muddy beer. It froths more than usual; and if you blow into it through a tube, you raise bubbles similar to those which may be formed in soapy water. Its specific gravity is somewhat, yet not greatly reduced; about 1021, perhaps; it is seldom at this period as low as 1016. It contains an abundance of albumen.

"At the same early period, blood drawn from the arm exhibits the buffy coat. The serum is much diminished in density, and contains a considerable quantity of urea. There is no decrease in the fibrine; perhaps it is a little augmented; and there is no great change in the amount of coloring matter.

"In the more advanced stages of the disease, the quantity of urine is frequently not below the standard of health; and it sometimes considerably exceeds that standard, so as to constitute one variety of chronic diuresis (*anazoturia*), which some call diabetes insipidus. It is usually pale, slightly opaque, and of a very low specific gravity; 1014, 1010, 1007. Once, when the quantity of the urine was *not* in excess, Dr. Chris-

tison found the specific gravity to be no more than 1004. There is a corresponding reduction in the natural solid ingredients of the urine. Albumen, too, is present, but more uncertainly than in the early periods: fluctuations in this respect are more common than before. It is a mistake to suppose that the amount of albumen increases as the disorder advances. The contrary rule would be more near the truth. In general the albumen is plentiful and almost constant in the outset of the malady; less surely present as it proceeds; and sometimes entirely absent in its latter periods; and it is of importance to remark that the alteration in the specific gravity follows the opposite law. The declension of density, so far from being corrected, augments with the progress of the disorder. Hence the one of these morbid phenomena is a valuable check upon the other, considered as an index of what is going on in the kidney.

"And another fact, which it is essential for you to know and to remember, is, that in any stage of the disease, the supervention of febrile disturbance, from local inflammation or whatever other cause, tends to renew, for the time, those qualities of the urine which belong to the early period.

"Meanwhile, the disease advancing, the serum of the blood recovers more or less its lost specific gravity, in proportion to the decrease of albumen in the urine. The quantity of fibrine seems, in some cases, to diminish. But the striking and most characteristic change is the rapid disappearance of the coloring matter, the hematosin, as it is called. This may at length be so much reduced as to form less than a third of the healthy average. If venesection be occasionally employed, this process of depravation is accelerated; but it takes place whether blood be artificially withdrawn from the system or not. 'I am acquainted,' says Dr. Christison, 'with no natural disease, at least of a chronic nature, which so closely approaches hæmorrhage in its power of impoverishing the red particles of the blood.' Hence the peculiar pallid or dingy hue of the patient's skin; the leucophlegmatic and even waxy aspect which invariably stamps the victim of this complaint.

"These characters, then, of the urine and of the blood, when rightly compared and interpreted, reveal not only the existence of the renal disease, but also, with much probability, the stage or degree that it has reached.

"*Secondary Affections.*—Let us next review, a little more in detail, those secondary affections which I have already pointed out as being incidental to the subjects of this renal malady. They are of much consequence; for, in the course of the dis-

ease, more or fewer of them are almost sure to occur; most of them are productive of very serious distress; and some of them place the patient's life in immediate jeopardy, and often bring it to a premature end. Moreover it is by these secondary affections that our suspicion of the primary disease upon which they depend is, in general, first awakened; and it is to the prevention or the removal of these same secondary affections that our curative endeavors must chiefly be directed.

"The most common, and practically the most important, of them all, is anasarca; but of this, although I mention it first, I shall postpone, for a while, the further consideration.

"Another very common, and very important secondary complication, is the occurrence of what we compendiously call *head symptoms:* various manifestations of derangement in the cerebral functions; headache, drowsiness, delirium, epileptic seizures, apoplexy. So frequently, indeed, is the death of the patient preceded by coma, with or without convulsions, that Dr. Christison considers this to be the 'natural termination' of the disease, or 'the mode in which it proves fatal when life is not cut short by some other incidental or secondary affection.' Of seventy fatal cases observed by Dr. Bright, death was ushered in by well-marked cerebral symptoms in thirty.

"I have already told you the circumstances under which these affections of the brain usually arise. They almost always follow any great diminution, or the entire suspension, of the secretion of urine. But this rule is not so strict as to admit of no exception. Occasionally, but I believe very seldom, the urine, in this disorder, is reduced to a very small amount, while the head remains undisturbed. Of this Dr. Christison has recorded a remarkable instance. One of his patients voided no more than two ounces of light urine daily, for nine days before his death; yet he continued sensible to the very last minute of his existence, and died simply of inanition. Sometimes apoplectic symptoms occur, and carry the patient off, although there has been no extreme or material reduction in the quantity of urine.

"Now when death has thus taken place in the way of coma, and the case had been complicated with anasarca, and serous liquid is found accumulated in unnatural measure in the cerebral ventricles, and in the tissue of the pia mater, it seems reasonable to ascribe the coma to the presence and pressure of that liquid. The dropsy has extended to the brain. And this view of the matter is strengthened by the connection which may sometimes be noticed between the accession of

coma and the visible increase of the dropsy in other parts of the body. My own experience accords entirely with that of Dr. Christison, as expressed in the following statement. 'If the dropsical fluid be allowed greatly to accumulate, drowsiness, the first symptom of the affection of the head, very soon makes its appearance in the generality of cases, and it will speedily pass to fatal coma, if not controlled, but the removal of the dropsy will usually remove the drowsiness.'

"To many cases, however, this explanation will not apply, there being no morbid collection of water within the skull, nor any other appreciable change there; nor, perhaps, any dropsy elsewhere. In such cases we refer the ultimate symptoms, the stupor and the death, to the poisonous influence of the urea in the unpurified blood upon the organs of animal life. Yet this explanation also has its difficulties. Urea must often circulate with the blood without affecting the brain. Dr. Christison states that he has repeatedly known the daily discharge of the solids of the urine to be reduced, for weeks together, to one-fourth of the natural amount, while, moreover, analysis of the blood showed that it was loaded with urea, without the appearance of any head symptom. Dr. Bright also relates a case to the same purpose. A person laboring under this disease of the kidney lived for four or five years under his occasional observation. The blood was analyzed in the earlier stage, and found to contain a large quantity of urea; as much as the urine itself contained. Yet this patient had no *fits* till towards the close of his life.

"I have sometimes fancied that the pale and watery condition to which the blood is at last reduced, may have something to do with the stupor and coma. I showed, you, some time ago, when speaking of spurious hydrocephalus, that similar symptoms are apt to ensue, in conjunction with a similar defect of hematosin. It would seem that, under such circumstances, the functions of the brain are exercised irregularly, languidly, and at length not at all, in consequence of the failing supply of its appropriate stimulus through the arteries.

"Another striking circumstance, observable in this disease, is a readiness of various organs of the body to inflame, and particularly of the serous membranes. According to M. Solon, who has lately published a thick volume on *Albuminurie*, this disposition has not been so manifest in France; but of its frequent appearauce in this country I can add my own testimony to that of Dr. Bright, of Dr. Christison, and of Dr. Gregory. Such intercurrent acute inflammation is not an uncommon cause of the patient's death. The pleura appears to

be much more often affected in this manner than either the peritoneum or the pericardium.

"It follows from this tendency, that when we come to inspect the dead body, we seldom find the kidney to be the only part in which structural changes are plainly visible. Most commonly evident traces of disease are met with in various organs.

"Disorder of the stomach and bowels is certainly a frequent companion of the renal malady: nausea, vomiting, flatulent distension, diarrhœa.

"It would appear, however, that these incidental and secondary complications prevail with irregular frequency in different places. They are probably determined, in some measure, by local and peculiar agencies. Thus vomiting and diarrhœa have been more familiar to the Edinburg observers than in London to Dr. Bright, or in Paris to M. Solon: while the headaches and coma, so often witnessed by the British physicians, have been comparatively uncommon in France.

"Disease of the heart, if not a secondary consequence, is a very frequent accompaniment of Bright's kidney. It is probable that the cardiac disease, and the renal disease, have sometimes no connection in respect to cause and effect, but are both results of some common cause; of habitual intemperance, for example.

"I am, however, of opinion, that the renal malady has a direct tendency, by its effect upon the blood, to generate disease of the heart. It induces anæmia; and anæmia, as I showed you on a former occasion, implies debility of the muscular texture of the heart, and leads to dilatation of its cavities; and the weak muscle, becoming irritable also, grows thicker as it labors more. In fact, this is the kind of cardiac disease which, more than any other, has been found coincident with the peculiar change in the kidney. Among 100 cases, recorded in a tabular form by Dr. Bright, there were 27 in which no affection of the heart could be detected. In 52 instances the heart presented the characters of hypertrophy, and of these no fewer than 34 were free from any trace of valvular disease. Among these 34 there were 11 cases of disease affecting the aorta: in the remaining 23 no cause for the existing hypertrophy and dilatation could be found in the heart itself, or in the great blood-vessels. The true cause may therefore be reasonably supposed to have been the renal disease, operating upon the involuntary muscle through the quality of the blood.

"Whether the renal disease be ever produced by the cardiac, is more questionable. In the acute renal affection, when it proves early fatal, the kidney is always found to be gorged with blood. And the customary intermixture of blood with the urine warrants the belief that the same condition was present in the patients who have recovered. From this state of engorgement springs, apparently, the subsequent series of changes. It is therefore a plausible conjecture that whatever tends to produce congestion of the kidney, tends, also, to aggravate, and may even cause, the peculiar changes in question. I need not now tell you that disease of the heart frequently occasions congestion of the venous system, and gorge the viscera with blood. Under this influence the liver often *enlarges*. On the other hand, disease of the heart, even such as gives rise to venous congestion and to dropsy, often lasts long, and proves ultimately fatal, without the occurrence of albuminous urine, and without any appreciable change of structure in the kidney.

"Pain or tenderness of the loins, is sometimes, and sometimes only, an accompaniment of the renal disease. This symptom is more often present in the early than in the later stages of the malady. It occurred in one-third of twenty-eight cases narrated by M. Solon. Dr. Gregory noticed it in the half of his patients.

"*Causes.*—The *causes* of the disease of which I have been endeavoring to sketch the outline, are often obscure. Its more obvious symptoms, in the chronic form of the malady, have been observed, in very many instances, to begin soon after the exposure of the body to wet and cold under unfavorable circumstances. But it is by no means certain—indeed the probabilties preponderate on the other side—that, in these instances, the renal disorder had not previously existed in a latent state.

"It is certain, however, that the acute kidney affection, which may be considered identical with febrile dropsy, does often arise under similar circumstances of exposure, and is attended with a marked disturbance of the functions of the kidneys. And Brights disease, in its chronic form, has been noticed as occurring in persons who had previously suffered, and had apparently recovered from, an attack of febrile dropsy. Are we not warranted in believing that the recovery was *imperfect* in such cases? that the kidney had sustained irretrievable injury? and that the disease, although from the treatment employed, or by lapse of time, it had become tranquil or la-

tent, was ready again to give indications of its existence upon any repetition of its exciting cause?

"Again, it is matter of common observation that intemperate habits have often preceded the development of this disease. Yet we may conclude that intemperance in drinking is rather a predisposing than an essential cause, from the fact that the malady is not unknown among children, and other persons whose manner of life has been strictly sober. I had lately an example of this in a young girl, fifteen years old, who had never menstruated. And this leads me to remark that the renal disorder has been known, in many instances, to follow a sudden check or suppression of the catamenia. It has sometimes seemed to owe its origin to blows received upon the loins.

"The complaint happens at all ages: less often, however, in extreme youth than afterwards. Sabbatier records that he saw, while in the service of M. Baudelocque, a young infant affected with anasarca and albuminous urine. The first case described by M. Solon, is that of an infant, seventeen months old, in whom similar symptoms appeared shortly after exposure to cold and wet. In 1838 a boy, between five and six years old, anasarcous, and passing bloody and albuminous urine, was in the Middlesex Hospital, under the charge of my colleague Dr. Wilson. M. Constant, in the *Gazette Médicale*, for 1835, cites the case of a child of five years of age; and M. Rayer gives two plates, representing the kidneys of two children, the one five and the other six years old, who both died of dropsy with albuminous urine, the sequel of scarlet fever. In each of these the changes described by Dr. Bright were well marked, and the bulk of the kidney was considerably increased.

"The malady is, however, much more common in adults; not, in all probability, because the kidney is more readily susceptible of it at one period of life than another, but because, as life advances, the circumstances which tend to produce or foster it become of more frequent operation; intemperance, exposure to great vicissitudes of temperature, and (perhaps) disease of the heart.

"It occurs, I presume for the same reasons, oftener in men than in women.

"Dr. Christison suspects that Bright's kidney happens chiefly in persons of scrofulous habit; and he found it, in several instances, coincident with phthisis pulmonalis. My own experience would not have led me to that opinion. I partake in M. Solon's doubts, whether the coexistence of the pulmonary

consumption and of this renal malady is more than casual. Dr. Bright tells us that 'the instances in which phthisis, or any form of scrofulous or tubercular disease, has been connected with the renal affection, have been decidedly rare.'

"*Nature of the Disease.*—What, after all, is the true character and essence of the organic metamorphosis which constitutes this formidable disorder, Bright's kidney? All that has been ascertained of its early stages, of its course, and of its causes, furnishes to my mind a strong presumption that the structural change, in all its varieties of aspect, may be ultimately traceable to an undue accumulation and stagnation of blood in the blood-vessels of the kidney. Those curious arterial bunches, the Malpighian bodies, appear especially to be overfilled and obstructed. Rayer calls the complaint *albuminous nephritis;* and perhaps the congestion (which unquestionably is present in what I consider the acute form of the malady) may sometimes pass into chronic inflammation. We do not, however, find that it ever terminates in suppuration; yet suppuration is no uncommon event of true inflammation of that part, excited by violent injuries, or by the lodgment of calculi within it. It seems to me more probable that the mischief done to the kidney is owing to extreme congestion, and its usual consequences—the oozing forth of the blood in substance, or of some of its constituents, into the interstitial textures, as well as into the excretory tubes of the kidney. The appearance of these ingredients of the blood, and even sometimes of blood itself, in the urine; the increased size of the gland in the earlier stages; the various shades of color which its surface and parts of its interior present, as the coloring matters of the effused fluids are more or less absorbed; the impermeability of those altered parts by artificial injections; the ultimate shrinking and hardness of the organ as the disorder becomes chronic, and absorption proceeds; these are all consistent with this theory. It is plain that the morbid conditions of the urine depend, in part at least, upon the mechanical transudation of certain portions of the blood, which pass through the kidney unchanged, as through an inert filter. Mixed with the urine we find serum, with its albumen, and its salts, which diminish the acidity of the mixture, or even render it neutral; and in many cases we find more or less of the coloring matter also of the blood. Those portions of the extravasated fluid which have no outlet of escape, solidify, and thus obliterate the natural texture of the part they have invaded. The obstruction of the emergent

veins of the kidney by firm clots of blood is in harmony with the same supposition.

"When the kidney is thus spoiled, its natural function is imperfectly or but partially performed. The change which it should effect upon the blood, by purifying it from urea, fails to be accomplished. The albuminous impregnation, and the other altered qualities of the urine when voided, may be explained either by supposing that the secreting power of the whole gland is interfered with, but not absolutely suspended; so that the urine is incompletely elaborated; or, by supposing that portions of the gland are spoiled, and portions remain sound and effective; that true urine is formed by the healthier portions, and mixes with the constituents of the blood which pass, as such, through the diseased portions. The latter of these hypotheses is most in accordance with the fact that, in the advanced stage of the disorder (when we may conceive the spoiled parts to have become mere solid unchanging masses) the albumen is apt to disappear from the urine: and also with the fact, that complete recovery does sometimes appear to take place; in which cases we may imagine that, although a small portion of the substance of the gland has undergone irremediable change, enough of it remains healthy to serve the wants and purposes of the economy."

The style of these lectures, as the foregoing extracts will bear testimony, is concise, simple and perspicuous. So much information could hardly have been imparted in fewer words. No details necessary to the full elucidation of the subject are omitted, but at the same time that the reader experiences this to be so, he will admit that, in the minuteness of his descriptions, the author never grows tedious. We are free to state, that a careful examination of the volume has satisfied us, that it merits all the commendation which has been bestowed upon it at home, and in this country. It is a work adapted to the wants of the young practitioner, combining as it does sound principles and substantial practice. It is not too much to say, that it is a representative of the actual state of medicine as taught and practised by the most eminent physicians of the present day, and as such we would advise every one about embarking in the practice of physic to provide himself with a copy of it. Y.

ART. V.—*On the Nature and Treatment of Stomach and Renal Diseases;* being an inquiry into the *connexion of Diabetes, Calculus, and other Affections of the Kidney and Bladder, with Indigestion.* By WILLIAM PROUT, M.D., F.R.S., Fellow of the Royal College of Physicians. *From the 4th revised London Edition, with plates.* Philadelphia: Lea & Blanchard. 1843. 8mo. pp. 465.

This treatise has been now many years before the public, and no more satisfactory proof of its excellence could be given, than the fact that it has held a place, so long, among the standard works of the profession. It would seem quite an unnecessary service to commend to our readers a work, the reputation of which is so well established, and altogether out of time to undertake an analysis of its contents. Doubtless this would be true, if Dr. Prout's valuable labors were as well known in this region of our country as the present re-print of his book promises soon to make them. But at present we doubt, whether this volume is to be found generally in the libraries of our physicians. At all events, we have not often met with it in private libraries, and since it treats with singular clearness and ability of a class of affections, unsurpassed in importance by any other, and which often perplex the practitioner by the obscurity of their diagnosis, we have concluded that we could not appropriate a few pages more profitably, even at this late day, than to an analytical review of this work.

Dr. Prout divides the proximate alimentary principles into four classess, viz: the Aqueous, the Saccharine, the Albuminous, and the Oleaginous, and in conformity with this constitution, he considers the pathology of the assimilating processes under four similar heads. The first part of his treatise comprises the following subjects:

CHAP. I. General observations on the Pathology of Aqueous assimilation and secretion.

Section a. Of the relation of Fluids to the assimilating processes in Health and in Disease.

b. Of the relation of Fluids to Nephritic operations in Health and in Disease.

Chap. II. General observations on the Pathology of Saccharine assimilation and secretion.

Section a. Of Saccharine urine. *Diabetes.*

b. Of Oxalic acid; Oxalate of Lime.

c. Of Lactic acid.

Chap. III. General observations on the Pathology of Albuminous assimilation and secretion.

Section a. Of an Excess and Deficiency of Urea.

b. Of Albuminous urine.

c. Of Lithic acid.

d. Of Cystic Oxide.

Chap. IV. General observations on the Pathology of Oleaginous assimilation and secretion.

Section a. Of an Excess and Deficiency of fat.

b. Of Cholesterine and its Deposites, &c.

The important class of diseases, arising from the Mineral matters incidental to the proximate animal principles, will be separately considered under the head of

Chap. V. General observations on the Pathology of the Incidental Mineral matters entering into the composition of organized bodies.

It is only lately that the important truth has come to be generally recognized, that the bodies of animals consist essentially of the proximate alimentary principles by which their existence is maintained. But these matters are greatly modified by the assimilating organs, and hence it follows, that any derangement of their function must show itself in an unhealthy state of the secretions, especially of the liver and kidneys. Thus, in diabetes, sugar is found not only in the urine, but also in the blood, which in healthy individuals never contains it, the stomach having lost the faculty of assimilating this principle. The first step in the derangements producing this disease, consists, therefore, in the greater or less destruction of this faculty. The saccharine state of the urine is regarded by Dr. Prout as the characteristic symptom of this affection, to the consideration of which the first section of his second chapter is devoted.

Diabetic urine is transparent, of a pale straw or greenish

color, of a specific gravity greater than water, being sometimes as high as 1.055, and containg in a wine pint very nearly two ounces of solid extract. The quantity of urine voided is sometimes enormous, thirty pints having been discharged in twenty-four hours, for weeks and even months together, in some cases. The tongue becomes loaded with a white frothy mucus, the mouth clammy, while the appetite remains unimpaired, or is even better than ordinary; but under the wasting discharge of urine, the patient daily loses flesh and strength, the skin grows dry, a sense of chilliness and fatigue is felt, accompanied by dull pain in the back and loins and in the lower extremities. If the disease be recognized and properly treated, at this stage, its progress may in many cases be arrested, and health may be restored. Unfortunately, however, it is apt to be overlooked, or mistaken, and under an improper treatment advances to an incurable stage. The urine is voided in still greater abundance, the thirst increases, the mouth is dry and parched, the tongue becomes preternaturally clean and red, an uneasiness is felt in the region of the stomach, attended with a sense of sinking, and incessant craving after food and drinks. The mind suffers, and grows fretful and suspicious, the pulse becomes feeble and accelerated, some important organ is involved in disease, the breathing becomes disturbed, a cough comes on, and phthisis is finally developed, or else the patient grows comatose and sinks under symptoms of cerebral disease. Such is the progress of diabetes in its simplest form.

Diabetes seems to be peculiar to mankind. In horses and other animals the urine is often much increased in quantity, but is never saccharine. A predisposition to the disease is frequently inherited, and when this is present many exciting causes may bring it out, such as exposure to cold, attacks of gout and rheumatism, the drinking of cold fluids while heated, mental distress, concussions or injuries of the back, and cutaneous diseases. It almost "always accompanies carbuncles, and malignant boils allied to carbuncles."

The prognosis is generally unfavorable, except, as mentioned

in the early stage of the disease. Much of the treatment consists in regulating the diet. Saccharine matters, and those convertible into sugar are to be avoided as much as possible. It is to be carefully guarded in quantity, as well as quality. The same remark applies equally to the use of fluids, and the management of drinks in this disease is often felt to be one of the points of the greatest difficulty. Water is to be sparingly used, and milk and animal decoctions to be taken instead. By regimen the quantity of urine is to be diminished, and its character improved. As to medication our author observes:

"We have already stated, that no specific remedy is known for the essential symptom of diabetes; in other words, we can no more directly restore the paralyzed function of the assimilating organs, than we can directly restore the paralyzed function of an arm or of a leg. The medical treatment of diabetes, therefore, must be conducted on general principles; and consequently must not only vary according to the degree and complication of the affection; but according to the general state of health and the peculiar constitution of the patient."

General blood-letting is demanded in recent and acute cases, and may be repeated according to circumstances; and in most cases local bleedings from the epigastric region are beneficial. Purgatives are much relied on by some, but in the estimation of our author, they are most useful when limited to the regulation of the bowels. The action of the skin is to be restored, if practicable, by the use of diaphoretics. Tonics, sedatives and astringents are also prescribed, with many other remedies not referrible to any of the preceding classes. Among the most recent and active of these may be mentioned creasote, prussic acid, colchicum, strychnine, and iodide of potassium, which are employed empirically. When complicated with other diseases, as, for example, with disorder of the liver, such complications must be taken into account, and the treatment modified accordingly.

In connexion with the hepatic complaint often associated with diabetes, Dr. Prout takes occasion to protest against the

abuse of mercury, which he believes to be very great in the treatment of such affections. Mercury, he insists, "ought never to be administered for those slight deviations from health which can be readily removed by safer expedients," and should be cautiously administered to those on "whose constitution its effects have not yet been ascertained." He reprobates the practice of "a calomel pill at night, and a black dose in the morning, for all diseases and all kinds of constitutions—from the congested liver of the overgorged alderman, to the torpid liver of the weak and indolent female." And, we suppose, few of his readers will have the hardihood to differ with him. It must be admitted, that some discrimination is necessary in the practice of physic.

Dr. Prout closes his remarks on diabetes with an account of a diuresis which occurs in children soon after the period of weaning, and which may be characterized by albuminous matters in the urine, by an excess or deficiency of urea, or by saccharine matter. At first the urine is scanty and high colored, but as the disease proceeds the quantity rapidly increases; the bowels are disordered; the skin harsh and dry; and the pulse quick and irritable. If badly treated, it terminates in organic lesion of the kidneys. It is in all its forms a disease of a formidable character, and when it has assumed its worst aspect may be considered hopeless. The treatment in it consists in regulating the diet; in removing the sufferer to a pure bracing air, and carefully attending to the state of the bowels. Of diet, milk forms the most eligible article.

We pass, with a single quotation, over the section on the *oxalic acid diathesis*, which our author supposes to prevail in the class of diseases now under consideration:

"The presence of oxalic acid in the system, as far as the primary assimilating processes are concerned, arises from one of two causes, which, for want of a better name, we term *proximate* causes; viz: the non-assimilation of oxalic acid taken as food; and the mal-assimilation of saccharine aliments, and in extreme cases, perhaps, of albuminous and oleaginous aliments. The first of these causes may exist without the second, and may even give occasion to the formation of a

nephritic oxalate of lime attack, without producing, in a marked degree at least, the constitutional symptoms usually present in this diathesis; of which I have seen instances. It is probable that the first cause operates principally in those in whom the *converting* function of the stomach is *deficient in power;* and in whom, at the same time, there is a predisposition to the oxalic acid diathesis; for there is every reason to believe that the perfectly healthy stomach can convert small quantities of the oxalic acid when mixed with the articles of food. The second cause consists in something more than mere weakness; there is in this case a *positive derangement of the converting function* of the stomach. These two conditions, however, of the converting functions of the stomach, may be supposed to be so nearly allied, as not only in some instances to co-exist, but to pass into each other."

The next section treats of *lactic acid* as one of the modifications of these derangements. This acid, with the muriatic, is always present in the stomach during the reducing process, derived partly from the blood, and partly from the imperfectly assimilated food. The predominance of the muriatic acid seems to be connected with an inflammatory state of the system—that of the lactic acid, with a state of irritation. Thus the muriatic is found in dyspeptics of a plethoric or gouty habit, and the lactic in those of a delicate or nervous constitution. Other acids accompany these two, when they abound, as the oxalic, carbonic, butyric, &c., but that product which proves the most troublesome is nitrogen, which, in nervous subjects, "is occasionally developed from the stomach in enormous quantities," and which being less stimulating than any other of the gaseous principles is apt to be retained, thus distending the stomach, and adding greatly to the miseries of the patient. The muriatic acid, derived from the muriate of soda existing in the blood, when it passes from the stomach into the duodenum, is probably neutralized by the soda of the bile, when that secretion is healthy. But the lactic acid must descend into the intestines uncombined, since there can be no equivalent of alkali in the duodenum to neutralize it, and is taken up by the lacteals, or passes into the inferior bowels, giving rise to a variety of unpleasant symptoms.

The natural condition of the intestinal canal, Dr. Prout conceives, "with the exception, perhaps, of the cœcum, is either neutral, or occasionally verges towards slight acidity on the one hand, and slight alkalescence on the other." Disturbance, therefore, must be the result of the passage of acid matters into the intestines. The symptoms will vary in different individuals, and according to the age of the subject. Colic, tormina, diarrhœa, intussusception, and convulsions are among the consequences which may flow from it. In very many persons a nervous headache is the attendant upon this state of things, which involves, also, a derangement of the biliary secretion. This headache is limited to the forehead, attended by nausea, intolerance of light and sounds, and is apt to terminate very suddenly, with a sensation as if bile were passing the gall-ducts. Our author ascribes the relief experienced under such circumstances, to the flow of the bile into the cœcum, where the soda existing in it corrects the acidity upon which the headache depended. He continues, on this subject:

"It is remarkable that those who suffer least from the derangement of the primary digestive processes, often experience the greatest inconvenience from the derangements of the secondary class, or from their consequences. This is perhaps referable in a certain degree to the fact, that such individuals pay less attention to diet, than those whose condition of stomach obliges them to live more cautiously. As an illustration of this point, we may observe, that we frequently hear such individuals boast that nothing disagrees with their stomach; and the consequence is, that they cannot be persuaded to abstain from the most improper things; but partake of every thing alike that comes in their way. In the prime of life, and in sound constitutions, this state of things goes on for periods varying according to circumstances, and particularly according as individuals are indolent or active. In almost all instances, however, sooner or later, the urine becomes loaded, the liver congested, and more or less of fever and derangement of the stomach and bowels; in short, what is usually called a *bilious* attack, takes place. For this a calomel pill and a black dose are resorted to, and all being apparently righted, the individual resumes his former hab-

its; and after a time again undergoes the same round of changes."

In malarious districts such derangements of the assimilating organs are not only more common, but they are also very often followed or accompanied by ague, rheumatism and neuralgia. The treatment of the primary derangements consists in the use of laxatives, regimen, tonics, and alkalis, and where they are succeeded or complicated, as above, quinine must be superadded, or bleeding, purgatives, or other remedies, demanded by the symptoms.

We should like to follow our author through his elaborate and instructive chapter "on the *pathology of albuminous assimilation*," but having, in the previous article, given a long history, under the name of "Bright's disease," of one of the disorders of the kidney described under this head, we will limit ourselves to a notice of the section on lithic acid.

This substance, "which is derived from the albuminous principles," in a healthy condition of the urine remains transparent after cooling, and even until the spontaneous changes incident to it have commenced. But in certain morbid conditions of the system this acid is rendered incapable of being retained in solution, and is precipitated when the urine becomes cold, sometimes even before, either pure, or in combination with soda or ammonia. So long as it is not deposited in the *warm urine* little danger is to be apprehended, unless a calculus has already formed in the kidney or bladder. When a disposition is shown in the acid to concrete together, or when it is deposited in very large quantity, the formation of a calculus may be feared.

Of the sediments of the urine the yellow is esteemed the least indicative of disease. It is produced in healthy or slightly dyspeptic individuals by errors of diet, changes of weather, and a variety of other circumstances disturbing the digestive function. Now and then, perhaps, this deposit is seen in the urine of the healthiest persons. The *red* sediment indicates feverish or inflammatory action, and the deeper the color, generally, the more severe the inflammatory symp-

toms. The *pink* sediment attends upon certain visceral affections, especially of the liver and spleen. The most perfect specimens Dr. Prout has seen, "have occurred in dropsical cases associated with hepatic disease. When dyspepsia is connected with formidable visceral disease, the urine is occasionally of a bright pink color."

"The *symptoms* local and constitutional accompanying the deposition of lithic acid in the massive condition from the urine, are more or less of pain or uneasiness in the region of the kidneys; with irritation and sense of heat about the neck of the bladder and urethra. There is also a frequent desire to pass the urine, which is voided in small quantities at a time, and without affording the usual relief; the sensation still continuing of something being left behind in the bladder. The digestive functions also, as in most cases where urinary deposites are concerned, are considerably deranged, or very liable to become so; and the patient is very frequently troubled with acidity of the stomach, flatulence, &c., particularly after any little error in diet; as the use of fruits, acescent wines, &c."

The causes of lithic acid sediments may be classed under the three heads of *diet*, *exercise*, and *atmospheric influences*, of which the first is much the most effective, although the want of exercise, especially if conjoined with full or improper diet, must be regarded as a fruitful source. It is an interesting fact, that "many individuals subject to derangements of the general health, seldom feel so well with respect to their health, as when these deposits take place in the urine." This is particularly true in cases of gouty individuals.

Of the treatment, it is not necessary to say much. That must be conducted upon general principles. All the measures which promote the process of assimilation are to be carefully observed and enforced. Our author justly observes, that—

"It cannot be too strongly impressed upon those who suffer from gravelly affections in middle life, that the *cause* of these affections lies deep in the constitution; and that to counteract their distressing effects, perseverance in the appropriate diet, regimen, and medicine, is absolutely necessary.

It is absurd to look for permanent relief in these complaints, by attention to regimen and medicines for a few days or weeks. In obstinate cases, an adherence, more or less strict, according to circumstances, to the principles above stated, should be adopted for months, or even for years, to ensure success."

Our author correctly remarks, in the preface, that the principles of his work include almost every disease to which organized beings are liable, but in our partial notice we shall be obliged to omit many of the subjects. Cystic oxide is one of these, which we are the readier to do because it is a disease of rare occurrence. So, too, the chapter on *the pathology of oleaginous assimilation and secretion*, including the cause of obesity and leanness, and the nature, symptoms, and treatment of gall-stones, will be passed over, while we proceed to give some account of the diseases connected with insoluble incidental matters in the urine. And first of the phosphate of magnesia and ammonia, and the phosphate of lime.

In a healthy condition of the system, these are evolved in a state of solution; but under the influence of disease the balance of the natural affinities is broken, and they are deposited in the urine, and in other parts of the body in the solid form. Dr. Prout thinks the symptoms produced by the triple phosphate of magnesia and ammonia, and the phosphate of lime, as well as the immediate origin of these two compounds, are different.

"The *triple phosphate of magnesia and ammonia* is usually deposited from the urine in the form of perfectly white shining crystals, and constitutes what is denominated *white gravel;* in contradistinction to the lithic acid crystals, which from their color, is termed *red gravel.* The white form of gravel sometimes occurs alone, but very frequently it alternates with, or is accompanied by, the pale colored lithic amorphous sediments; or the amorphous variety of phosphatic sediment, to be presently described."

Nervous irritability is characteristic of this diathesis, which manifests itself in various ways. In some cases, the symptoms simulate asthma; sometimes spasmodic action of the

bowels, borborygmi and flatulence attend; and again the patient has copious, exhausting motions. The symptoms indicative of the deposition of phosphate of lime are not so strongly marked, although partaking of the same irritable character. In the latter a cachetic state of the system is often present, manifested by cutaneous eruptions of a scaly or leprous character. The urinary affection appears to alternate with this eruptive disease, growing better when the disorder of the skin is worse, and *vice versa*.

"The *phosphate of lime* is deposited from the urine in the form of an impalpable amorphous powder, which is generally white; though occasionally it is slightly tinged with the coloring matters of the urine. The properties of the secretion depositing the phosphate of lime are various. In a few instances, I have seen deep colored, acescent urine, of a specific gravity above 1.030, and possessing all the sensible qualities of urine in an exalted degree, deposite phosphate of lime in large quantity; indeed urine depositing this salt is not unfrequently acescent, at least when passed."

These salts, the triple phosphate, and the phosphate of lime, although occasionally, are yet rarely, deposited in separate states. In by far the greater number of cases the earthy deposites consist of a mixture of the two, the properties being varied in every possible degree.

"The phenomena when presented by the urinary deposite, consisting of the *mixed phosphates*, vary considerably, according as the one or the other salt abounds, and according, more especially, to the source of the phosphate of lime. When the triple phosphate predominates, the deposite assumes more of the crystalized form; when the phosphate of lime predominates, and is derived from the kidney, the deposite is usually in the form of a white (or yellowish) impalpable powder; or if the phosphate of lime be derived from the coats of the bladder, the deposite usually appears partly in the form of a white powder, and partly in the form of large crystalline granules, enveloped in much tenacous mucus. As in the other form of the deposite, the phenomena presented by the urine abounding in the phosphates is liable to great variations. When the disease is constitutional, and not connected with local causes, as disease of the bladder, &c.,

the urine is almost always pale colored, and, on the whole voided in greater quantity than natural. The quantity (and of course the quality) is subject to very great and capricious changes, and sometimes, especially by day, the urine is voided in enormous quantity, amounting to actual diuresis. On such occasions the urine is pale colored and of low specific gravity; indeed, I have occasionally seen it perfectly limpid, and scarcely differing in weight from common spring water. At other times, the urine is voided in very small quantity, in which case it is deep colored, and of a specific gravity of 1.025 or higher. When the urine is abundant and of low specific gravity, it is usually free from deposite; on being submitted to heat, however, it generally becomes turbid from a deposition of the phosphates. When voided in small quantity, on the contrary, the urine is often turbid when passed; and in almost all instances, on standing for a time, it deposites the mixed phosphates in abundance. When the bladder is diseased, the urine is generally alkalescent from the beginning; and the earthy deposites are enveloped in large quantities of mucus, which is sometimes tinged with blood. In all instances, however, even if it be slightly acescent at first, it becomes alkalescent on cooling; hence, from its proneness to decomposition, urine depositing the phosphates is apt to become exceedingly offensive in a short time after it is passed."

A deposition of the mixed phosphates is apt to be accompanied by very distressing constitutional symptoms. Great derangement of the chylopoietic viscera is present, attended by universal irritability of the general system. The expression of the countenance becomes sallow and haggard, and, at length, coldness of the legs, anaphrodisia, great languor and depression of the spirits, and other symptoms of extreme debility supervene, such as those which attend upon diabetes.

"An excess of the mixed phosphates in the urine, considered as an idiopathic disease, is not of common occurrence; and the deposition of these salts is much more frequently accompanied by local diseases of the urinary organs. Hence a deposition of the phosphates usually accompanies protracted bladder and prostate affections; and thus superadds too frequently the miseries of stone to the other sufferings of the patient. Even the presence of a stone in the bladder, of

whatever it may be originally composed, if permitted to remain, sooner or later produces a deposition of the phosphates; which, by incrusting the stone, adds rapidly to its bulk; and thus increases tenfold the patient's misery."

In the treatment of these affections, diet and regimen are matters of the utmost importance, and our author insists, in regard to the former, that a due proportion of animal food is demanded by the asthenic condition of the vital powers. The diet should consist of solids principally, and he does not object to the use of wine and cider where the individual has been in the habit of drinking them. Whatever disagrees with the stomach is, of course, to be avoided, and, in like manner, as to exercise, whatever fatigues or exhausts, either bodily or mentally, will do mischief. The exhilarating air of the country, agreeable employment, and absence from care, are influences to be invoked in the cure of this complaint, and will often effect it in "those slighter and induced cases, in which the affection is not complicated with local injury." We cannot follow the author into the details of the medical treatment;—he states the general method of it in the following sentence:

"Sedatives, tonics, and antalkaline remedies, therefore, of various kinds, and variously associated, according to the particular symptoms and circumstances of the case constitute the most efficient means we possess of combatting that peculiar condition of the system, accompanied by a deposition of the triple phosphate in the urine; and in general the slighter cases will readily yield to the due administration of these remedies, while the severer and more deep-seated cases will commonly become ameliorated under such a plan of treatment."

Book II is devoted to the consideration of Mechanical Diseases, or *those involving lesions of the kidney and bladder, and particularly from the presence of concretions in these organs.* These subjects, of all that are discussed in the volume before us, are those which have attracted the most general attention, and with the symptoms of which the profession is most familiar. Calculi in the kidneys—the diseases

produced by, and liable to be confounded with calculus in these organs—calculi in the bladder—the diseases liable to be confounded or complicated with vesical calculi—hemorrhage from the urinary organs—incontinence and retention of urine—these are affections so clearly marked, and generally so distressing in their nature, that the practitioner is not likely either to disregard them, or to err in his diagnosis. A chapter is devoted to the removal of calculi from the bladder, by solvents, and by the operations of lithotomy and lithotrity. In regard to the first mode, however, the author feels "obliged to confess that in spite of all the boasted light of modern science, the problem remains unsolved, and that we cannot by any known medicinal means, or at least by any known method of directing these means, get rid of a large calculus in the bladder, by other than mechanical expedients." Still, he does not regard the removal of calculi from the bladder without surgical operation, as impossible. On the contrary he thinks that "considerable progress has been made in certain favorable instances, towards the attainment of such object." But he remarks that the introduction of lithotrity has taken away a good deal of the interest which was once felt in this subject, affording as it does, where practicable, a safe mode of removing visceral calculi. Unfortunately, however, the cases are very numerous in which it is not practicable.

The third part of Dr. Prout's work embraces many facts and speculations in physiology which we should be glad to embody in this article, but the few pages left us forbid the attempt. From an inspection of the heads of the several sections it will be perceived how rich a store of information is here provided for the diligent searcher after knowledge of the animal functions. They are as follows: "The ultimate composition and structure of organized bodies, and of their general physical characters, as dependent on their composition;" "alimentary proximate principles;" "the primary processes of assimilation;" "the secondary processes of assimilation;" "the general pathology of the primary and secondary assimilating processes;" "the general composition

and properties of the blood;" "the functions of the liver, and composition and relations of the bile to the assimilating processes;" "biliary concretions or gall-stones;" "the functions of the kidneys, and composition and relations of the urine to the assimilating processes;" "urinary calculi, their composition and characteristics;" to which is subjoined "an *appendix* containing tables illustrating the number of fatal cases of diabetes and calculus in different districts in England and Wales; the comparative prevalence and laws of formation, and alteration of different calculous deposites; of the comparative prevalence of calculous affections at different ages and in different sexes; and of the rate of mortality from the operation of lithotomy."

The student who is in quest of the fullest information on any of these topics, afforded by the present state of the science, will find it in this volume. Dr. Prout is not a mere compiler of other men's opinions and discoveries, but an original inquirer, and deep thinker, whose learning in the related sciences imparts uncommon value to his physiological and medical speculations. As a specimen of his manner of solving the difficult problems of vital action, we give the following extract, in which an attempt is made to account for certain changes occurring during the process of assimilation:

"Supposing the chlorine or muriatic acid found in the stomach to be derived from the common salt existing in the blood and in the stomach, another question arises,—what becomes of the soda from which the muriatic acid has been separated? The soda remains behind, or is absorbed into the mass of blood, and a portion of it no doubt is requisite to preserve the weak alkaline condition essential to the fluidity of the blood. But the larger part of this soda is probably directed to the liver, and is elicited with the bile in the duodenum; where it is thus again brought into union with the acid, which had been separated from the blood in the stomach. These observations, illustrating the importance of common salt in the animal economy, seem to explain, in a satisfactory manner, that instinctive craving after this substance, which is shown by animals.

"Admitting that the decomposition of the salt of the blood,

&c., is owing to the immediate agency of a modification of electricity, we have in the principal digestive organs a kind of galvanic apparatus, of which the mucous membrane of the stomach and intestinal canal, generally, may be considered as the acid or positive pole, while the hepatic system may, on the same view, be considered as the alkaline or negative pole."*

So, in the following quotation, we have the function of the liver and kidneys explained, with the phenomena which result from their perverted action:

"The liver and the kidneys (as well as certain minor glandular appartus) either in virtue of the polar arrangements above mentioned, or of some other (vital) property, must, in a state of health, possess the *function of secreting* from the blood those peculiar principles adapted for their respective operations; and of producing such further changes in them as the animal economy may require. The changes produced by the liver on the principles to be eliminated by that gland, are in some degree of an organizing kind; that is, the principles separated retain some of their vitality for ulterior purposes; while the changes produced by the kidneys on the principles designed to be removed from the system by these glands, are, in a state of health, without exception, of a disorganizing kind—that is, every thing passed from the kidneys is denuded of its vitality, which is carefully retained as it were in the system. The liver, therefore, may be said to possess an *organizing*, the kidneys a *disorganizing function*. This deduction is illustrated by what takes place in the diseases of the liver and kidneys. Thus, when the liver is diseased, its selecting or organizing functions are impaired or lost; and instead of selecting, and further changing into bile those principles, which the welfare of the economy requires should be removed from the blood and employed elsewhere, such principles are retained in the system; or if they do pass through the liver and are separated by that organ, they are imperfect-

* "This notion or opinion, which was first advanced by me many years ago, seems to have lately received some confirmation from the experiments of Matteuci, who found that when the liver and stomach of a rabbit were connected with the platinum ends of the wires of a delicate galvanometer, a deviation of the needle took place amounting to fifteen or twenty degrees. This action became very feeble, or entirely ceased, after the death of the animal; hence he inferred that it depended on the vital action of the organs, and not on the difference of the chemical properties of their secretions."

ly adapted for their ulterior functions; and thus in both ways great derangements of the health are the consequence.—Again, when the kidneys are diseased, their selecting and disorganizing functions are impaired or lost; and the deleterious principles of the blood, (e. g. the urea) are no longer selected in preference for separation from that fluid; while the superflous or effete albuminous principles, which in the healthy kidney would have been selected and converted into the lithate of ammonia, either remain in the blood, or pass through the kidneys unchanged."

Here we must close our notice of this work. Many subjects have been passed over altogether, while others have been noticed so briefly, that only a very partial knowledge of them can be acquired from this article. Enough, however, has been said to convey to our readers an idea of the scope and character of this treatise on "*Stomach and Renal diseases.*" "Some books," says Lord Bacon, "are to be read—others are to be read and *digested.*" It is plain, that the work before us belongs to the latter class. It is a work to be studied, and one which will amply repay the diligent student for all the time bestowed upon it. The physician in extensive practice, too, will find it most valuable as a book of reference, in many of the obscure cases of disease which he must often encounter. We are glad that a new edition of it has been published in this country, and cannot doubt that it will be eagerly sought after by the profession. No diseases, we believe, have been more neglected by the physicians of our country than many of that important class to the study of which Dr. Prout has devoted a long life; certain, we are, that they have no where been treated with greater clearness and ability than in the volume which embodies his large and matured experience. Y.

Selections from American and Foreign Journals.

Pathological Causes of Cyanosis.—Dr. Craigie has given, in the *Edinburgh Medical and Surgical Journal*, for October last, some very interesting observations on the pathological causes of cyanosis.

"It has been usually supposed," he remarks, "that the open state of the *foramen ovale*, whether direct or oblique, is a primary lesion of the heart, and is pernicious to the patient, in allowing the free intermixture of the blood of the right chambers of the heart with that of the left. Within certain limits this idea is well-founded; and in a certain number of cases, the open state of the *foramen ovale* tends to impede nutrition and to abridge the duration of life. I am, nevertheless, satisfied, both from the facts of the case now related, and several others, of three circumstances; *first*, that the open state of the *foramen ovale* is rarely a primary and solitary lesion; *secondly*, that when it is a solitary lesion it is not injurious, and the venous blood of the right auricle is not thereby necessarily mixed with the arterial blood of the left auricle; and, *thirdly*, that in opposition to what has been hitherto usually taught, the open state of the *foramen ovale* is in a large proportion of cases the means of prolonging life.

"It is unnecessary for me to enter into any formal defence the latter conclusion, which, however paradoxical it may seem, and however opposed to the usually received dogmas, flows almost directly from the facts which may be traced in every case of open *foramen ovale*. That, in short, it is not the primary lesion. From the phenomena of the cases recorded, on the contrary, and from the frequency of the arctated or contracted state of the pulmonary artery, it must be inferred

that the obstructed state of that artery is the primary lesion, and determines not only the open state of the *foramen ovale*, but the hypertrophy of the right ventricle. This is the result, whether the pulmonary artery is only greatly narrowed in calibre, or terminates in a *cul de sac*, or is obstructed by a membranous partition formed by the coalition of the semilunar valves.

"The effect of such an impediment is manifest. The blood cannot pass into the pulmonary artery with the requisite freedom and facility. The result is over-distension, *first* of the right ventricle, and excessive labor of its muscular apparatus; *secondly*, of the right auricle, and excessive labor of its muscular apparatus, with extreme dilatation of its membranous portion; *thirdly*, over-distension and congestion of the whole venous system all over the body. The lungs, meanwhile, receive little or no blood, and, consequently, the blood is not duly aerated or supplied with oxygen, and cleared of carbon and carbonic acid. This is doubtless an evil and a great one. But Bichat has obscurely suggested, and Dr. Williams and Dr. Kay have clearly shown, that dark-colored blood, or that which is venous, is adequate to maintain vital action. It is, indeed, a less evil, and more tolerable than total obstruction in any of the large vessels, and especially in a vessel like the pulmonary artery. Everything that we now know of these cases shows that the obstruction to the circulation through the pulmonary artery must be the main cause of the short and transitory existence of persons laboring under this severe lesion; and that the open state of the *foramen ovale*, instead of being, as William Hunter and other authors imagined, a cause of death, furnishes the only means by which life can be prolonged, while a function so important as that of the circulation through the lungs is impeded.

"I am further entitled to infer from various facts in the history of the development of the ovum, that the obstructed, or it may be, the undeveloped state of the pulmonary artery, is the anatomical cause of the perforated septum, and of the origin of the aorta from the two ventricles when that malformation is observed.

"It would lead to some curious and interesting results to inquire by what means the impeded function of the lungs is in these cases compensated; for that it is compensated by the action of the skin and other membranes, can scarcely be doubted. But this would lead me into a field too extensive for consideration at the present time."

Cure of Hydrocephalus by means of large doses of Hydriodate of Potassa. By Dr. Woenniger.—A child nearly two years old, of a scrofulous and lymphatic constitution, and who had before suffered from affections of the head and eyes, was attacked in August, 1841, after some days indisposition, with a severe inflammation of the brain. Dr. W. first saw him on the 25th August, when he commenced a severe antiphlogistic treatment; eight leeches were ordered to the back of the neck, and the bleeding from the bites was long maintained; followed by a large blister to the neck, upon which free suppuration was kept up, ice-water in a bladder to the shaved head, mustard plasters to the calf of the legs, and powders of 1 gr. of calomel with jalap, every two hours. Besides this, neapolitan ointment was freely rubbed upon the top of the head and neck.

"No improvement was observed, notwithstanding the continued employment of the above means, and repeated applications of leeches, although several passages from the bowels were obtained. On the contrary, the child grew worse, and on the 5th day, unmistakeable signs of water in the ventricles manifested themselves: namely, fixed and watery eyes, immovable and widely-dilated pupil, entire blindness, tetanic rigidity of the muscles of the neck, retraction of the head, paralysis of the left extremities, deep stupor, pulse slow (50 beats), having before been very small and quick, frequent screeching and vomiting, &c. In this desperate condition, Dr. W. recollecting the recommendations of large doses of hyd. pot. in such cases by Dr. Röser, laid aside all other means and prescribed R. hydriod. pot. ʒj., aquæ distillat. ℥ss. of which 40 drops were to be taken every two hours, in sugared water; and on the next day as much as 50 drops each dose. During the first three days no improvement was manifested, but upon the fourth, (the ninth of the disease), there was a decided remission of several of the unpleasant symptoms, and especially a free secretion of urine, which had been very scanty before From this time, and after nearly ʒij. of hyd. pot. had been taken, a rapid improvement was observed, and by the 12th day, the child was considered as cured. It must also be remarked that, at the beginning of the attack, there was observed an extensive, inflamed swelling of almost stony hardness, on the left side of the neck, immediately over the clavicle, which, treated with emollient applications, passed rapidly into a copious and deep suppuration of the cellular tissue. Large sloughs of the cellular tissue were discharged with laudable pus, so that after the entire removal of these,

the muscles of the neck could be seen as if dissected out. The entire healing of this deep wound was completed about the end of September.

Dr. W. thinks, that the hyd. potass. not only produced a critical discharge in the copious secretion of urine, but that it also, perhaps, occasioned a beneficial revulsion by causing the swelling above mentioned to suppurate. He thinks, also, that the mercury which had been taken, may have contributed to produce this favorable result.—*Oppenheim's Zeitschrift, für die gesammte Medicin*, April, 1843.—*Am. Jour. Med. Sci.*

Propriety of operating in cases of Cataract, where only one Eye is Affected.—Mr. Nunneley, of Leeds, has discussed this subject in a paper read before the *Prov. Med. and Surg. Association*, and published in the *Provincial Journal*, Sept., 1843. Mr. N. conceives that the propriety of operating, or not, must be mainly determined by "the state of vision after the operation," for he remarks: "I suppose, although it be granted a person sees sufficiently well with one eye, no one will deny that *cæteris paribus*, two eyes are better than one; and from the well known fact that when the function of any organ or structure is long suspended, the power of exercising the function becomes ultimately lost, it is, as a mere result of precaution, extremely important to keep the affected eye in such a state of activity, that in case any accident or disease happen to the other, its powers, even though somewhat impaired, may then be taken advantage of; which can only be safely and effectually secured by having removed the opaque crystalline lens, and permitted the light to keep up the activity of the retina. The fear of the sound eye being injured or lost by the operation upon the cataractous one, though possible, is, I I consider, hardly deserving of notice; because, when the operation is properly performed, it must be so rare, as to be rather amongst possibilities than the probabilities. While, on the other hand, the sympathy between the two eyes, not only in their healthy states, but in their morbid condition, is so strong that those who have been accustomed to watch ophthalmic affections will at once admit the validity of the argument of removing any diseased condition of one eye lest the other also partake of it, for the singularity is, that when disease exists in one eye, not only is the other apt to become impaired, but for the corresponding structure to assume the very same morbid condition. Thus, if the conjunctiva in one is af-

fected, that of the other is also very apt to assume the same diseased action; if the cornea, the cornea; if the iris, the iris; the lens, the lens; and so on; while it is also incontrovertible that the morbid condition of the eye primarily affected being removed, that of the one sympathetically or secondarily involved is also frequently remedied. Indeed, cases are on record where cataract having been removed in one eye, commencing cataract, or even amaurosis, in the other has been cured; and there must have been many, if not identical, at least analogous, instances. Indeed, in some cases where I have operated upon an eye in which cataract was fully formed, being only in an incipient state in the other, I have strongly suspected the progress of this latter has been much delayed by the removal of the opaque lens of the opposite eye.

"Now, although every one may not be inclined to think the remote risk of the sound eye being lost from injury or accidental affection very great, nor the danger of sympathetic disease so imminent as to justify our incurring any immediate hazard to it by operative interference with the affected eye, yet no person will deny, that if in reality there is no such danger to the sound eye by operating upon the affected one, the possibility of these remote contingencies are solid arguments in favor of active measures being at once resorted to. The last argument, of confusedness of vision being the result of an operation, is so very plausible, and, indeed, imposing, that it is this which has, I presume, principally determined the general practice of not interfering when only one eye is affected, and which, I confess, formerly decided my practice; for I have sent many persons away without doing anything which, with what I have since seen, especially in the three cases to which I shall now shortly allude, I should certainly not do. Indeed, the fact itself that traumatic cataract sometimes disappears, as mentioned by Pott and Hey, as an argument against operating, is, in reality, a strong argument in favor of it; for, if not all, at least in such of those cases where traumatic cataract disappears, the capsule of the lens has been ruptured, and subsequently has been absorbed, thus occurring what it is the object of the operation to accomplish; yet in these cases no mention is made of inconveniences resulting from the cure; and when the lens had been so displaced as to press upon the iris, everybody agrees as to the necessity of manual interference, lest not only the one eye be altogether lost, but the other be implicated in the change."

Mr. N. relates three cases to show that "in point of fact,

the double confusedness of vision, so much feared, does not occur," and concludes that "considering, on the one hand, the ease with which the operation may be performed; the little or no disturbance produced, either to the other eye or general health; that in many cases of traumatic cataract, where the capsule is ruptured, the lens is ultimately removed, even when the surgeon does not interfere; and that what has been so much feared, and in my opinion constituted the only valid argument against the operation, the difference in the refractive powers of the two eyes producing confused or double vision, in reality does not occur; and, considering, on the other hand, the arguments above mentioned in favor of operating, I think we are fairly jnstified in recommending that, not only in traumatic, but in all cases where a young person, one who is under middle age, has cataract in one eye, the lens should be broken up, and removed by absorption."—*Am. Jour. Med. Sci.*, Jan., 1844.

Tobacco in Hysteria and Spasmodic Stricture of the Uterus.—By Wm. B. Diver, M.D., of Cincinnati. In the American Journal of Medical Science, April, 1842, is recorded, a case of Hysteria cured by tobacco. On reference to my note-book, I found recorded, Philadelphia, Dec. 9th, 1841, a case of Hysteria, in which tobacco was used with the most prompt and beneficial effects. The patient was a servant in a highly respectable family in Philadelphia.

I was called to see her, at first, in a very distressing condition from having swallowed a number of large pins, which I succeeded, after a great deal of trouble, in removing from the œsophagus, with Dr. Bond's admirable Gullet Forceps.

Several weeks after the occurrence of this accident, I was again called to see her in violent hysterical convulsions. The spasmodic contractions were so strong as to require the united efforts of four powerful adults to prevent her being injured. The eyes were forcibly drawn towards the inner canthus, so as to present a case of double squinting. The pupils were contracted to a small point, and the iris was insensible to a brilliant light. The tongue was frequently protruded between the teeth, and severely wounded.

After considerable trouble I succeeded in opening a vein in the arm, and abstracted about 16 ounces of blood. This was followed by a temporary cessation of the convulsive

throes, which, however, returned with increased violence, so that the patient was almost entirely unmanageable.

To prevent further injury of the tongue, and to facilitate the administration of medicine, a cork enveloped in the end of a towel was held between the teeth. Large doses of tinct. opii. and tinct. assafœtid. were administered, and attended with but transient effects; the convulsions were returning again with increased violence. In this stage of the case, finding the ordinary antispasmodics unavailing, I thought of using tobacco. I accordingly ordered a poultice of strong Scotch snuff to be applied warm to the epigastrium. Very soon after this application was made, the spasms began to decrease in frequency and violence; the countenance to assume a natural appearance, and after six hours of intense suffering, the patient became quiet and rational.

Several months elapsed before there was any return of the symptoms; then, however, the patient was removed from my observation, and treated with the ordinary remedies.

The utility of tobacco in *Spasmodic Stricture of the Urethra*, was forcibly exemplified in a case, several years before the one just related, occurred.

H. E., a respectable mechanic in Philadelphia, after indulging in venereal excess, found himself unable to void his urine. In the course of 24 hours the bladder became distended, presenting the elastic tumor above the pubis, which is so characteristic of this condition of things.

After ineffectual attempts to force the stricture with a gum-elastic catheter, and in the absence of a silver one, I applied wet tobacco leaves to the inguinal and femoral regions, with the most satisfactory result. The patient soon began to exhibit the peculiar effects of tobacco on the system: and in a little while the spasm became relaxed, the contents of the distended viscus discharged, and the sufferer relieved.

In order to prevent a recurrence of symptoms, a catheter was introduced and secured in the bladder by an appropriate bandage.

If any apology is due for bringing these cases before the profession, it may be found in the maxim—"*Palmam qui meruit ferat.*"—*Western Lancet*, January, 1844.

Diabetes Mellitus successfully treated by Ioduret of Iron.—This case was admitted into the Hotel Dieu, having experienced the premonitory symptoms of diabetes three weeks

previously, which were now completely confirmed; he passed fifteen quarts of urine daily, which contained a considerable quantity of sugar.

The treatment consisted in restricting him to animal diet, the administration of a bottle of claret daily, with a flask of Bagnol's wine, broth without bread, and lemonade, etc., for drink; he also took four pills, each containing five grains of the ioduret of iron, in the twenty-four hours. Under this mode of treatment the quantity of urine discharged soon diminished; after the third day the man passed only twelve quarts; during the subsequent days the quantity underwent a still greater diminution, and the thirst, together with the other symptoms of diabetes, subsided; the urine discharged exceeded the quantity of fluid ingested by about a pint, and contained but a very small proportion of saccharine matter. On the 30th of September he drank about three quarts of tizan, in addition to his wine and broth, and passed four quarts of urine. From the 30th of September to the 4th of October the treatment was continued, (the number of pills being increased to five) and the improvement of the patient kept pace with it; the quantity of urine passed, at the latter date, was nearly normal, and it contained hardly a trace of sugar: the thirst had ceased, the strength was returning, and the patient was enabled to leave the hospital on the 5th of October in good health. He was seen a few days afterward in town, and continued well.

The ioduret of iron must have had considerable effect in this case, as the usual diet of animal food, etc., recommended in these cases, had previously failed in doing good till combined with this medicine.—*Braith. Ret.*, from *Provin. Med. and Surg. Jour.*, Nov. 5, 1842, p. 112.

Magneto-Electricity in various Diseases.—We copy from Dr. Walkly's pamphlet cases of several diseases successfully treated by magneto-electricity.

Amenorrhœa.—H., a young lady, aged 13; has never menstruated, but instead is subject to a cutaneous eruption every fourth week. This commenced three years since, and usually continues from four to six days. Has had an epileptic attack, occasioned by the sudden disappearance of the eruption from the use of cold applications, and also a choreal af-

fection of the left side from a similar cause. May 11th, commenced the daily use of electricity, by placing her feet in a vessel of warm water with one conductor and applying the other to the nerves proceeding from the first and second lumbar vertebra. This was four days previous to the usual appearance of the eruption. The fourth application was followed by the menstrual discharge in the place of the habitual cutaneous affection. No pain of the back preceded its appearance. Since then her general health has been good and her periods regular.

Chorea.—Miss ——, aged about 14, was attacked with chorea of the right side in August, 1842. It was supposed to have been occasioned by fatigue, consequent upon watching in a sick family, and was of a very annoying character. It was impossible for her to keep the affected side and limbs quiet in any position when awake, though the spasmodic action was not usually violent. On the first of October, I commenced the employment of electricity, and continued it with but little success for twelve days. A marked amendment then ensued, which was maintained until the 18th, when she was dismissed from my charge entirely recovered.

Deafness.—Mrs. ——, in the fall of 1840, had an attack of bilious intermittent fever, recovery from which was followed with deafness in both ears. December 23d, 1842, she called on me for a trial of electricity. I made a direct application to the auditory nerves, twice a week for three months, which gradually restored the organs to their healthy state. This continued until September, 1843, when, from another attack of fever she again became deaf. She has been for a short time past under electrical treatment, and her gradual improvement now indicates an entire recovery in a few weeks.

Dysmenorrhea.—Miss ——, aged 30, has suffered from painful menstruation for several years; complains of an almost constant dull aching pain in the small of her back. June 3d, 1843, for the relief of this, made six applications ineffectually. Upon more particular enquiry, found she was subject to habitual constipation. To remedy this, prescribed a mixture of tinct. sem. colchici, 2 ounces; tinct. apocyni, 4 ounces; a teaspoonful to be taken three times a day, alternating every three days, and discontinued the electricity. The daily use of this was, however, resumed on the 28th, and on the 1st of June the menses appeared without dysmenorrheal affection.

The further application of the remedy was omitted, nor has there occurred any occasion for its use since.

Paralysis.—Mr. ——, a painter by trade, from the effects of white-lead used in his occupation, had lost the use of both arms, or rather he had what is termed *dropped arms.* If any thing was placed in his hands, he could grasp it apparently as firmly as ever, but had no further control over them. This situation had continued for several years. June 22d, 1843, I commenced applying to the affected limbs continuous and powerful shocks, twice per day, for about ten minutes each application. The paralysis was gradually removed, and on the 14th day he was discharged from my care entirely restored.

Sulphur Waters on the Secretory Organs.—Between the action of mercury and the more powerful of the sulphur waters on the organic system, the most striking similarity exists. Dr. Armstrong long since remarked the resemblance between mercury and the sulphur waters of Europe, and confidently expressed the opinion that the latter are equally as powerful as the former, in their action upon the secretory organs; and with this very important difference, that while the long-continued use of mercury in chronic diseases, generally breaks up the strength, that of the sulphur waters generally renovates the whole system. Mercury has heretofore, by common consent, been regarded as the most powerful alterative we possess. I am not prepared to dispute this high claim of the medicine, but this much I will assert, as a matter of professional experience, that sulphur water, in my hands, has proved an *alterative* quite as certain in its effects as mercury, though somewhat slower in its operation. Not only so, I believe it to be far better adapted than mercury to a large circle of cases in which glandular obstructions and chronic inflammations are to be subdued. If the claims of the two remedies for preference, were otherwise near equal, the great advantage on the score of safety from the sulphur water, would give it immense preference over its rival. Numerous cases present themselves, however, in which they are used in conjunction to great advantage; where this becomes necessary, however, I have, as a general rule of practice, found it best not to continue the mercury longer than six or eight days: nor is it often necessary to use it continually during that period.—*Boston Med. and Surg. Jour.*, Feb., 1844.

Objections to the use of Pessaries.—The following are the objections to the use of Pessaries, by Dr. Hamilton, long the distinguished Professor of Midwifery, at Edinburg. They are sufficiently intelligible "without note or comment."

Med. Examiner, Feb., 1844.

"Firstly, They can only act as palliatives, whatever may be the degree of the disease.

"Secondly, They necessarily keep up a continued irritation in the passage, and of course excite a mucous discharge from the vagina.

"Thirdly, Unless properly adapted, they make injurious pressure on the contents of the pelvis.

"Fourthly, If not frequently taken out and cleansed, they become incrusted with a calcareous matter which proves highly irritating.

"Fifthly, They subject the patient to the charge of a medical attendant for life.

"And lastly, Cases from time to time occur, where, from the laceration of the perineum, &c., no ordinary pessary can be retained."

Face-Ache.—This common affection, so often supposed to be excited by a diseased tooth, although the latter fails to be detected—a rheumatic, chronic kind of pain, wholly different from that of tic-douloureux,—is often speedily curable by *muriate of ammonia*. This salt should be given in doses of half a drachm, dissolved in water, three or four times daily. About four doses will be sufficient to test the potency of the remedy. At other times the iodide of potassium, in five or six-grain doses, is quickly effective towards a cure. The efficiency of the latter remedy renders it probable that the affection is of the nature of periodical inflammation.

Dr. Watson's Lectures.

The alleged infecundity of females born co-twins with males. Dr. Simpson, in a very interesting paper on this subject, concludes—

"1. That, in the human subject females born co-twins with males, are, when married, as likely to have children as any other females belonging to the general community.

"2. That, when they are married and become mothers,

they are, in respect to the number of their children, as productive as other females.

"3. That the same law of the fecundity of the female in opposite sexed twins seems to hold good among all our uniparous domestic animals, with the *exception* of the cow alone."

Ed. Med. and Surg. Jour.

Sign of Pregnancy.—The surest token of pregnancy, says Dr. d'Outrepont, is a *dark-bluish hue* of the vaginal mucous membrane, a symptom which is more valuable inasmuch as it is not evanescent or confined to one period, but continues from the period of conception to that of labour. Dr. d'Outrepont has not only met with this appearance uniformly in the human subject, but in different animals which he examined in every period of pregnancy, and which he destroyed to ascertain that no fallacy attended the suspicion of gestation.

Neue Zeitschr. fur Geburtsh. xiv., 3.

THE WESTERN JOURNAL.

NEW SERIES.—VOL. I.—NO. III.

LOUISVILLE, MARCH 1, 1844.

MAGNETO-ELECTRICITY IN DISEASE.

The readers of this Journal will remember a reference, made in a former number, to the success of Dr. Walkly, of Tuscaloosa, Alabama, in the treatment of various complaints by *magneto-electricity*. We received from Dr. Walkly, a short time since, a pamphlet, of nearly sixty pages, giving a history of fifty-six cases in which he applied this agent with decided benefit. His experience in the use of the remedy has now extended through upwards of two years, in which time he has tried it in cases of rheumatism, paralysis, leucorrhœa, dysmenorrhœa, amaurosis, epilepsy, hysteria, intermittent fever, neuralgia, and amenorrhœa. Of the latter complaint Dr. W. says, his journal contains a record of *forty* cases, "all of which have been successfully treated by means of electricity, and in a much shorter time than under the usually prescribed course of medicine." One or two applications, just before the expected period, generally brought on the catamenia in recent cases of dysmenorrhœa. He has not seen mischief result from the application of electricity,

where the suppression depended upon pregnancy, in two cases of which he resorted to it without suspecting that pregnancy was the cause. His practice is to pass "a rapid succession of shocks through the uterus, until pain is felt in the lumbar region, and this is induced in from five to ten minutes by placing the negative electrode directly above the pubis, and the positive to the spinal nerves of the lower lumbar vertebræ." Another mode adopted by many, which has some advantages, is to place one conductor in a warm bath in which the feet of the patient are immersed, and the other to the back of the neck.

Dr. Walkly's success in the employment of this remedy seems to have been decided. In seven cases of amaurosis, out of eleven, he states that the relief from it was complete, one was benefitted for a time, and only three remained unimproved. He reports cases of *angina pectoris*, without, however, insisting upon the diagnosis, which he cured by electricity. Asthma, also, it seems, has yielded to its influence, and that too where the disease had been of long standing. "I have," he says' "treated eleven cases of *chorea*, all of which were cured, with a single exception. No other remedy was used, except occasional aperients." Out of seventeen cases of *deafness* in which he resorted to it, eight are said to have been entirely relieved.

This, certainly, was extraordinary success, and if anything approaching it can be attained generally, magneto-electricity must soon come to be regarded as among the most efficient of our curative measures. Making all due allowance for the ardor of one who, probably, is riding his hobby hard enough, we are inclined to give great credit to Dr. Walkly for the perseverance with which he has applied his favorite remedy to so many forms of disease. Nor can we close this notice without expressing the hope, that others will engage in the same interesting field of experiment.

Excellent magneto-electrical machines are made in this city by Mr. Jacob Walter & Son. Y.

MEDICAL INSTITUTE OF LOUISVILLE.

Dr. Cooke, as announced in our last number, having resigned, the Managers of the Louisville Medical Institute have united the chairs of Theory and Practice, and Pathological Anatomy and Clinical

Medicine in one professorship, under the title of "*Pathology and Practice of Medicine,*" to which Dr. Drake has been appointed. The Institute has now the number of professors usual in the medical schools of this country.

At the late annual Commencement, the degree of *Doctor of Medicine* was conferred on forty-seven young gentlemen. The honorary degree of M. D. was conferred on Dr. Charles G. Ballard, of Green Castle, Indiana, and on Dr. Silas Ames, of Montgomery, Alabama. Y.

SUMMER COURSE OF MEDICAL LECTURES.

Several members of the Faculty of the Medical Institute have associated themselves with a number of the physicians of Louisville, for the purpose of conducting a course of Lectures in the city, on all the departments of medicine, during the summer. The course will commence on the 1st of April, and be continued until the 1st of November, with a vacation during the months of July and August. An excellent opportunity will be afforded by the course to students for acquiring practical knowledge, of which it is expected that many will avail themselves. Y.

PARIS' PHARMACOLOGIA.

A new edition of this work, which has been so long one of the great favorites of the profession, has been published by the Harpers, of New York, in a single volume, having been re-written by the author to bring it up to the existing state of the science. Not a word in commendation of it is necessary, and we only notice it now to give information to our readers, that this new edition places the work within their reach. The present is a re-print of the ninth London edition. The fundamental doctrines of the work remain as at first announced, but, says the author, "so rapid and extraordinary has been the advancement of every branch of science during the last ten years, that its very language has become obsolete; a new Pharmacopœia had appeared during this interval, enriched with newly-discovered substances and novel preparations, and with a nomenclature radically changed. The science of chemistry had also, by the aid of quantitative analysis, assumed a new aspect; so that it was impossible, without remodelling the whole work, to render it consistent

with the science of the day." By the performance of this necessary task, Dr. Paris has not only kept his work from becoming obsolete, but brought it before the public in a shape which will continue it for a long time in the hands of those who are studying "the theory and art of prescribing."

The work is for sale at the bookstore of Messrs. Morton & Griswold, in this city. Y.

MEDICAL DEPARTMENT OF THE ST. LOUIS UNIVERSITY.

The newspapers of St. Louis report an unfortunate occurrence, as having taken place in regard to this school. It seems that a vault, containing subjects for dissection, was broken open, and a body partly dissected taken out, and left exposed upon the commons. A mob was the consequence: the college building was attacked; the windows were broken, and the museum pertaining to the school destroyed. The latter is represented as a great loss, many of the articles having been obtained from Europe at considerable expense, and others, prepared in this country, having required much time and labor in their preparation. All, it is stated by the newspapers, are destroyed or carried way by the mob. This is an occurrence deeply to be deplored. Such movements are contagious. They who have the supervision of anatomical affairs in schools of medicine cannot be too careful to avoid every cause which might provoke a similar outbreak of popular vengeance.

Since writing the above, we have received a paper containing a notice of Professor Linton's valedictory address, delivered to the graduates of the institution, eleven in number, on the last evening of February. No allusion is made in the address to the recent losses, but promises are made of large additions to their means of instruction before another season. The commencement was announced in the papers of the city, and went off quietly, the populace having, apparently, been appeased by seeing interred in the city cemetery the *debris* of the dissecting tables and anatomical museum. Y.

MAGENDIE'S PHYSIOLOGY.

We owe a copy of this work, a new edition of which he has given to the public, through the Harpers, to the politeness of the editor, Professor Revere. Magendie is one of the most distinguished of living physiologists, and his work has this excellence, that it is not a mere summary of the doctrines and doings of other men in this department of science. He is an original investigator, and in regard to the performance of experiments on living animals has surpassed all other physiologists. In fact, he has been thought to have carried these experiments farther than humanity justified, or the interests of science demanded. But it cannot be denied, that his untiring industry in the prosecution of such researches has enlarged the science of physiology, and contributed to the revolution which it has undergone, on many points, since the first edition of his Summary was published. As remarked by the editor, Magendie's work has this other admirable feature, that it pursues a "severe system of induction, excluding those imaginative and speculative views, which rather belong to metaphysics than physiology." The style, as that of such works ought to be, is concise and perspicuous, its descriptions are marked by clearness, and its well-arranged matter is brought within the compass of a single volume of moderate dimensions.

The book is for sale at the store of J. Maxwell, jr., and of Morton & Griswold, book-sellers, in this city. Y.

MEDICAL SCHOOL CATALOGUES.

We have before us copies of the catalogues of the Medical Schools of Lexington and Louisville, for the sessions just terminated. The Lexington catalogue contains 214 names; that of Louisville 242. The names of 19 resident graduates—*M.D's.* as they are styled—appear in the catalogue of the Lexington school, and but 5 in the catalogue of the Medical Institute of Louisville. Deducting the M. D.'s from each catalogue, the class at Lexington would remain 195, and that at Louisville 237. The Medical Institute, consequently, had more students, by *forty-two*, in attendance on its last course of lectures. It appears, from the catalogue, that the Lexington school, during the first seven years of an eminently prosperous career, attracted 1154 pupils. In the seven years during which the Institute has been in operation, the aggregate of its classes has amounted to 1305, or 151 more than the University. Y.

IMPEACHMENT OF PROFESSOR HALL, OF BALTIMORE.

We learn, from the Boston Medical and Surgical Journal, of the 28th of February, that the difficulty among the medical professors of the University of Maryland, last season, led to an impeachment of Professor Hall. He was charged with not properly sustaining the chair of which he had been so long the incumbent, with an unwillingness to pay old scores, &c. A very stout pamphlet, it seems, has been published by a committee appointed by the Regents, setting forth the testimony "in the Matter of the Impeachment." And the result of the whole matter is, that Professor Hall stands his ground "as popular as ever, and as obnoxious too." The charges, according to the evidence, were not sustained. The class in the University is reported to have been larger, last winter, than usual.

Y.

BOOKS RECEIVED.

We have received from the publishers, through Mr. Maxwell, Cooper's great work on *Hernia*, and Condie on the *Diseases of Children;* from the author, Dr. Stewart, *The Hospitals and Surgeons of Paris*, through Messrs. Morton & Griswold. The latter have also presented us Kennedy's *Obstetric Auscultation*, edited by Dr. Taylor, and published by the Langleys, New York. These are all valuable books, and will be noticed by us in due time.

C.

THE

WESTERN JOURNAL

OF

MEDICINE AND SURGERY.

EDITORS.

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CONTENTS

OF NO. IV.

ORIGINAL COMMUNICATIONS.

ESSAYS AND CASES.

ART I.—Speculations on the facts presented in the Analytical Report on Mesmeric Somniloquism. By DANIEL DRAKE, M.D. - - - - - - - 285

ART. II.—A Case in which the application of a small quantity of Strychina was followed by unpleasant effects. By W. L. SUTTON, M.D., of Georgetown, Ky. 313

REVIEWS.

ART. III.—Inquiries into the Frequency of Hernia, according to sex and age, and in relation to Population. By J. F. MALGAIGNE. - - - - - - - 315

ART. IV.—The Principles and Practice of Medicine. By J. ELLIOTSON, M. D., Cantab., F. R. S., &c. Edited by NATHANIEL ROGERS, M.D., &c., and ALEXANDER COOPER LEE. With notes and additions by THOMAS STEWARDSON, M.D., Physician to the Pennsylvania Hospital. - - - - - - - 340

SELECTIONS FROM AMERICAN AND FOREIGN JOURNALS.

Proximate causes of Hemorrhage. - - - - - 352
Mercury in Scrofulous Affections of the Lungs. - - 353
Veterinary Surgery. - - - - - - - - - 353
On the Increasing Frequency of Cancerous Diseases. - 356
Veratria in Facial Neuralgia. - - - - - - 358
Advantage of Medicines in a Liquid Form. - - - 358
The Automaton with articulated voice. - - - - 359
Capsules of Cod-Liver Oil. - - - - - - - 359
Compliment to the Memory of Sir Charles Bell. - 359
American origin of Syphilis. - - - - - - 360
Effects of a large dose of Quinine, adminstered by mistake. 362
Remarks on Italian Medicine. - - - - - - 363

ORIGINAL INTELLIGENCE.

Mesmerism. - - - - - - - - - - - 368
Lunatic Hospitals. - - - - - - - - - 369
The Burning-Wells of Kenawha. - - - - - - 373
Anatomical Atlas. - - - - - - - - - 375
Books Received. - - - - - - - - - - 376